



European Union Aviation Safety Agency
Comment-Response Document 2017-19

RELATED NPA: 2017-19 — RMT.0018 — 17.12.2019

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1. Summary of the outcome of the consultation

Summary of the comments received to NPA 2017-19 and EASA responses to clustered comments

I. Classification of parts:

- (a) Summary of the comments: Many commentators have stated that the classification of the criticality of the parts was confusing, since the NPA established that parts with criticality level (CL) IV were considered to have a CL higher than parts with CL I, while CL I corresponded to the higher safety relevance of the part.

EASA response: This approach was considered in the NPA to match CL I with EASA Form 1, but due to the number of comments, the proposed approach seems confusing and EASA has decided not to follow it. In addition, based on paragraph (b), there is no need to establish CLs.

- (b) Summary of the comments: Many commentators have stated that they do not consider it necessary to have four CLs, and two or three CLs should be sufficient to fulfil the intended objectives.
- (c) Summary of the comments: Many commentators have stated that it could be wiser to find another criterion to establish the distinction between different CLs (based on CS xx.1309 paragraphs, or following MMEL, or the FAA classification for 'commercial parts'). Some commentators proposed that EASA should establish guidance on this aspect.
- (d) Summary of the comments: Some commentators have stated that CL classification should not be in the implementing rule level but instead in the AMC, GM or CSs.
- (e) Summary of the comments: Many commentators have requested to add examples of parts being classified in the different CL categories.
- (f) Summary of the comments: Also, some GA commentators have requested that the classification should be different for ELA2 aircraft (e.g. passenger discomfort should not be a criterion for recreational aircraft).

EASA response to paragraph I, subparagraphs (b) to (f): The NPA proposal to have four CL categories of parts has not been well perceived by many stakeholders. Many have stated that it would be too complex to classify the parts into the different proposed categories without further guidance. After considering these comments, EASA is of the opinion that such detailed guidance to classify parts into the four categories considered could be too prescriptive and would not be adequate in all cases. Instead, EASA, as a response to these and other comments, establishes in Opinion No 07/2019 a classification of the parts based on two categories, depending on the safety effect of the part as installed on the aircraft: a) parts with a negligible safety effect will need no EASA Form 1, and b) other parts for which an EASA Form 1 or equivalent would be required for installation. The determination of the safety effect is to be done, on a voluntary basis, by the design approval holder (DAH), which would publish the affected parts in the instructions for continuing airworthiness (ICA). For the case of Standard Changes and Standard Repairs, EASA can also establish in CS-STAN which parts fulfil the 'negligible safety effect' criterion and can, therefore, be installed without an EASA Form 1.



II. DO–PO link (relationship between design and production organisations) is missing

Summary of the comments: Many commentators have stated that if no POA is required for certain parts (CL II to IV), how will the link back to the DO be guaranteed?

EASA response: See answers to previous comments. The proposal of Opinion No 07/2019 imposes the manufacturing of the parts under Part 21 Subparts F or G, i.e. POA in most cases, except for parts with a negligible safety effect, for which no manufacturing requirement would apply. Again, no DO–PO link exists in such case, but it is considered irrelevant in the case of parts that have a negligible safety effect on the aircraft operation.

III. Reporting to EASA in accordance with point 21.A.3A(b)

Summary of the comments: Some commentators have questioned how the requirement of point 21.A.3A(b) could be satisfied if no information from production would reach the design organisations, since no obligation for a DO–PO link would exist.

EASA response: With the classification of parts proposed with Opinion No 07/2019, only parts with a negligible safety effect could be manufactured outside the Part 21 environment. By the definition of these parts, they should not lead to an unsafe condition that would need to be reported to EASA as per 21.A.3A(b).

IV. Need of POA

Summary of the comments: How are authorities going to prevent a non-POA organisation from continuing the manufacturing of non-compliant parts?

EASA response: The proposal in the NPA relied in industry standards for the identification of the minimum manufacturing requirements and compliance with them, with no involvement from aviation authorities. Indeed, without an aviation authority empowered to take action against the manufacturing organisation in case of manufacturing flaws, the quick restoration of the adequate quality of manufacturing might be dependent on the willingness of the organisation to correct the situation. This situation has been considered as a weak point in the NPA proposal, and the proposal of Opinion No 07/2019 limits the parts that can be manufactured outside a POA environment. For the limited cases retained in the Opinion, it is considered that there would be no need for aviation authorities to take action on manufacturing organisations.

Summary of the comments: Should an authority oversee a PO when manufacturing only non-CL I parts but wanting to release them with an EASA Form 1?

EASA response: In both proposals, the one of the NPA and the one of the Opinion, the manufacturing of a part that belongs to an approved design can always be done by a POA (or under Subpart F of Part 21). This possibility exists for all parts, although it is only a requirement for some parts. Whenever parts are manufactured by a POA, the responsible aviation authority would conduct the oversight of the organisation and would take action in case of non-compliance, regardless of the classification of the part.

V. Maintenance of ALL components by an approved maintenance organisation

Summary of the comments: Many commentators have wondered why the NPA did not include the possibility of lowering the required maintenance standards for parts that, in accordance with the proposed new system, would not be manufactured by a POA and released as new with an EASA Form 1.

Some others still believe that maintenance should be conducted by an approved MRO, regardless of the CL of the part.



Among the commentators requesting the relaxation of the requirements for maintenance standards for certain parts were also GA stakeholders (for ELA1/2 aircraft).

EASA response: The proposal of the NPA was not to relax the requirements for the maintenance of any part, not even those that were proposed for production outside the POA environment. In the NPA, it was considered that the maintenance of parts by an approved maintenance organisation was necessary for the different categories of parts, considering the potential consequences of their failure (refer to CL II, III and IV proposed in 21.A.308 in the NPA). Considering that with Opinion No 07/2019 only two categories of parts are retained, it is proposed that for parts that have been identified to have a negligible safety effect, i.e. for parts that do not require an EASA Form 1 for manufacturing in the proposal of the Opinion, maintenance does not need to be conducted by a maintenance organisation that is subject to Commission Regulation (EU) No 1321/2014.

VI. MRO and suppliers' complaints about difficulty in stocking components

Summary of the comments: Commentators have identified that it is potentially feasible that the same part is an element in the design of two different aircraft types and the correspondent DAHs classify the part differently. This would create the need for maintenance organisations to store the parts separately, since the applicable requirement for the installation of the part in the different products would be different.

EASA response: These comments are noted, and indeed it is a situation that could happen. While Opinion No 07/2019 only considers two categories of parts, and the likelihood of the same part being classified in two different categories when it belongs to two different product designs is much reduced, the issue is not completely solved. Still it would be needed, in those cases where the same part is classified in both categories for different products, that the MRO stocks the parts separately. Another option is that the affected maintenance organisation only purchases these particular parts from the supplier that provides the parts with an EASA Form 1. A part with an EASA Form 1 can always be installed even when that part, according to the ICA published by the design approval holder (DAH), does not require it.

VII. Complaint about the marking of parts

Summary of the comments: Comments received requesting both (depending on the commentator) more detailed or less detailed marking of the parts not requiring an EASA Form 1.

EASA response: Considering that many parts benefiting from the flexibility created with this rulemaking initiative would be parts that would not be designed and manufactured exclusively for aviation use, imposing a European part approval (EPA) marking for these parts would not be easily achievable. Without the EPA marking, it would not be that easy to recognise the parts as not belonging to the original type design, but it can always be traceable by referring to the aircraft records and the design data of the approved modifications to the type design. The marking requirements of Opinion No 07/2019 do not change compared to those proposed with the NPA, but considering that the Opinion only assumes two categories of parts, the relevance of non-EPA marking for parts with a negligible safety effect is limited or even removed.

VIII. Extension of the concept to Part-ML

Summary of the comments: Some commentators have mentioned that the proposal should be extended to aircraft whose continuing airworthiness would be managed under Part-ML, i.e. aeroplanes of less than 2 730 kg and other small aircraft.

EASA response: EASA believes that GA would benefit from this concept, and plans to extend the concept to these aircraft. The NPA did not make reference to Part-ML since it was not possible



to refer in the proposed amendments (that is, still at NPA stage) to text that was not yet adopted as a rule, as it was the case for Part-ML at the time of publication of NPA 2017-19.

The rule amendment in relation to Part-ML was adopted in the summer of 2019. Therefore, the proposal for the amending text of Opinion No 07/2019 refers to Commission Regulation (EU) No 1321/2014 with all its subsequent amendments, including Part-ML when referring to the continuing airworthiness of certain small aircraft.

IX. Minor versus major change to the type design

Summary of the comments: EASA explicitly requested feedback from stakeholders as to whether the changes to the classification of the criticality levels should be considered as major or minor changes to the type design. The feedback received suggested both options.

EASA response: In the NPA, it was proposed that the changes to the criticality levels of the parts would be considered as changes to the type design, since the criticality levels of the parts were considered an element of the type design. Opinion No 07/2019 takes a different approach to achieve the same objective, i.e. the possibility for EASA to be involved in the classification of parts that is established by the design approval holder (DAH) by stating that the classification of the part is an element of the instructions for continuing airworthiness (ICA), and the ICA being part of the type certificate. This is achieved by proposing with Opinion No 07/2019 some other regulatory changes linked to the rulemaking task on 'Instructions for continuing airworthiness', in particular by allowing that changes to the ICA of a product can only be done by the product design approval holder.

X. DOA entitled to define CLs or changes to them

Summary of the comments: Some commentators have requested that since the DAH may voluntarily decide not to assess the criticality of the parts (i.e. to decide to establish or not the CL list), any suitable DOA should be entitled to do it.

Others have proposed this approach only for cases where EASA would be the one doing the assessment of the criticality.

EASA response: EASA, in agreement with the rulemaking group, considers that only the DAH should be entitled to, voluntarily, classify the parts into these categories. Being the default situation, i.e. in case that the DAH makes no classification of the parts, then the parts would require an EASA Form 1. EASA has also reconsidered the need to consider a new DOA privilege for the classification of parts, which was proposed in the NPA. In Opinion No 07/2019, no explicit DOA privilege is defined since the classification of parts has become a voluntary element of the ICAs, and the preparation of the ICAs is already a DAH obligation.

XI. DAH mandated to publish the CL list

Summary of the comments: Some commentators have stated that it could be of no interest to the DAHs to publish the CL list and, therefore, most probably they would not do it. These commentators stated that the DAHs should be mandated to publish the CL list.

EASA response: Some commentators expressed the concern that DAHs, especially type certificate holders (TCHs), would not establish the classification of the parts into the possible categories since they would have no incentive to establish such a list, which is a direct benefit for MROs and air operators, but not for DAHs. While EASA believes that the benefit for the DAHs' customers (e.g. airlines) would, in the long term, be an incentive for the DAHs to classify the parts, it is also true that a similar system in the US established for 'commercial parts' a few years ago has not typically led to the identification of such parts by DAHs.



EASA also considers that the classification of parts by the DAH should not be compulsory and imposed by rules, but that it is only permitted as a voluntary DAH decision. There is also the hope that for changes to the type design, design organisations being STC holders, will identify the parts with a 'negligible safety effect' to provide an advantage to their aircraft-owner customers. However, EASA has not retained the proposal to establish a generic list with parts that could be installed without an EASA Form 1. In the proposal of Opinion No 07/2019, EASA can only identify parts with a negligible safety effect in CS-STAN.

XII. Bilateral agreements

Summary of the comments:

Many (mostly non-European) commentators have stated that by amending the regulation as proposed in the NPA without amending the 'bilateral agreements' could create an uncertain situation as to whether certain European parts that are no longer released with an EASA Form 1, but are still in compliance with the proposed new European regulations, can be recognised as equivalent by foreign systems.

EASA response: It is the intention of EASA not to create a system that would not fulfil the expectations of non-European authorities and industry. This principle has been a major consideration when establishing the composition of the rulemaking review group for RMT.0018 and when moving from the proposal of the NPA to a less ambitious proposal in Opinion No 07/2019. However, even in the case where foreign authorities want to accept the European system proposed with the Opinion, still some changes in the bilateral agreements or implementing procedures describing the way European and non-European parts are recognised by each other's manufacturing systems might be required and this would inevitably take some time.

While these changes are not addressed or have not taken effect yet, the same system that exists today can continue to work when European parts are to be exported outside the European system.



2. Individual comments

(General Comments)

-

comment

4

comment by: *Malcolm BIRD*

Very pleased to see that this issue is being considered.

Point 1) We have a situation where a local company has been trained by an OEM to service a part and the OEM is quite happy that this engineer undertakes such maintenance. However, the local engineer does not have the necessary authorisations to issue Form 1. As a result, for those aircraft that need Form 1 certification, the part always has to be sent overseas, increasing the cost and timescales very significantly. It is hoped that any new rules will allow trained local engineers to carry on their work and issue sufficient documentation to demonstrate and acceptable means of compliance.

Point 2) It will be very useful for it to be clarified as to when an aircraft requires parts to be supported by a Form 1. For example we have type Certificated (C of A), Restricted Type Certificated (R-TC), Enduring EASA Permit etc. It currently appears to not be generally understood which aircraft need to have Form 1 released components and when other documentary proof is sufficient, with the result that varying standards and approaches are taken by different engineers/maintenance organisations working on the same aircraft type!

response

[Refer to Section 1](#)

comment

6

comment by: *Atol Avion*

This is welcomed addition for small DAHs and POAs.

response

[Refer to Section 1](#)

comment

65

comment by: *AIR FRANCE / ZYLAWSKI Christine***General comment :**

The proposition is a good way to simplify reception of commercial parts but the different release certificates complexifies the requirements for buyers and incoming reception personnel. Experience feedback demonstrates that reading a CoC is not always easy (ex: standard parts).

We recommend to reduce the number of criticality levels to keep it easy to implement.

response

[Refer to Section 1](#)

comment

71

comment by: *LHT DO*

1. Throughout the document we were confused by the wording "higher CL" and "lower CL" referring to the numbering of the CL instead of to the criticality. Thus "higher CL" means lower criticality and "lower CL" means higher criticality. Please



check if would make sense to reverse the numbering of the CL, so that "higher CL" means higher criticality and vice versus.

2. Please clarify: Is the 21/J DO required to conclude a PO/DO arrangement with non-21/G manufacturers?

3. Please clarify: How can the 21/J DO ensure that production changes will be released in a controlled manner (form, fit, function, fatigue and qualification not affected)?

4. Please clarify: Is the non-21/G manufacturer obliged to report production deficiencies to the 21/J DO? How can the 21/J DO ensure that production deficiencies by non-21/G manufacturers will be reported?

5. Please clarify: What data shall the 21/J DO make available for the maintenance of a part with a CL2 or higher? Are parts with a CL2 or higher allowed to be maintained? If yes, is the maintenance by a 145 organisation required?

6. Please clarify: Do subcomponents have the same CL as the assy?

response

Refer to Section 1

comment

74

comment by: *René Meier, Europe Air Sports*

Europe Air Sports (EAS) thanks the Agency for the preparation of NPA 2017-19. The comments presented here were co-ordinated with Europe Gliding Union (EGU), European Powered Flying Union (EPFU), and with Fédération française Aéronautique (FFA). The provision you propose are steps in the right direction of simpler, lighter and better rules for General Aviation as a whole, for aeronautical sports and recreational activities in particular.

We are deeply concerned about the interrelation between the outcome of this NPA and the future Part-M light, still in a "Brussels holding" and not available today. Any assessment of the provisions presented in this NPA is difficult, in the end full of uncertainties, probably even unfair to the authors. We think there are at least three different starting point where to start from, not only at Agency level, also within our organisations: Is it "certification" where we shall start, or is it "(continuing) airworthiness", or is it "maintenance"? What was the Agency's background when it started preparing the NPA?

We are looking forward to considerable cost-reductions once intallation of parts without Form 1 or equivalent will be in place. Our members have dozens of proofs that simple parts obtainable freely are sold at a ridiculously increased price when accompanied by an EASA Form 1, we know about totally unjustified tenfold price increases for really simple parts.



“Part-M light” is not on the list 6.1 Affected Regulations published on page 31/32, of course not because it is not published yet. Our communities, suffering badly from the lack of fully adequate provisions would highly welcome getting clarity on who this interrelation will work in future. We are, of course, aware of the fact that “Part-M light” is less than half the full story, Acceptable Means of Compliance (AMC) and Guidance Material (GM) represent some 2/3 of the material we are waiting for.

As a whole, we appreciate this NPA, except the fact that the questions you ask us to answer are more or less hidden in the very long and detailed "Rationale" of 3 1/2 pages, quite difficult to be re-worded not to lose the true sense of the question, but we try...

response

[Refer to Section 1](#)

comment

98

comment by: *René Meier, Europe Air Sports*

These are the questions EASA asks us to answer, unfortunately they are a bit hidden in the NPA.

Question 1
p 19/32
4th text block

EASA would like to receive the stakeholders' feedback on whether the Criticality Level assignment should be considered a minor change or, as proposed in this NPA, a major change.

Our opinion:

For non-CAT and for GA operations this should be a minor change, definitely for ELA1 and ELA2 aircraft, probably also for CS-23 Level 1, 2, 3 aircraft.

Herein is a problem of policy and process. From our perspective in sport aviation we can appreciate that in some cases of larger aircraft in CAT, decisions of this nature may well be perceived as major. However in the majority of cases in sport aviation the recognition of the validity of installing an alternative tyre tube, or secondary flight instrument or an equivalent standard fabrication standard carburetor diaphragm seems essentially minor. In a maintenance context, this is range of issues is recognized by the lighter, more proportional regulation of Part M Light (still in implementation). Thus rule formulation is complicated by the situation that there is to date no 'Part 21 Light', although we have heard such concept considered). We can see that the balanced implementation of this welcome rule is hamper by this situation. Similarly, it is difficult for our reviewers to comprehend some of the transfer and deletion of rules in this NPA between Part 21 and Part M (we have not considered Part 145). (MA501(c) to 21.A.308(a) is a case in point.) Equally CS-STAN and the SC/SR process are only mentioned in general discussion (see Rationale Page 21 footnote). Should not CS-STAN at least (and even Part M light (in prep) be referenced as an implicated document. Given the flexibility created by Part M Light it seems an opportunity is being missed here?!



	<p>Question 2 p 20/32 4th text block</p> <p>EASA would like to receive the stakeholders' comments on: One implication of relaxing the manufacturing requirements for certain parts is that some requirements (e.g. 21.A.133(c) or 21.A.157 or 21.A.165(f) for the organisations manufacturing under Part-21 would not be applicable to organisations entitled to manufacture parts with assigned Criticality Levels II, III or IV.</p> <p>Our opinion: This is probably only a question of a level playing field. This is a natural consequence that is catered for in this initiative, with all the commercial implication. I do not see that this is a reason for not moving forward on this NPA.</p> <p>Question 3 p 21/32 3rd text block, in the middle</p> <p>The Agency would like to receive comments from the stakeholders regarding the need to retain information regarding the manufacturing standards of the (or some) new parts to be installed during maintenance once the part undergoes workshop maintenance.</p> <p>Our opinion: 'Retention of information' is covered in Part M and will be covered by Part-M light, we see no reason why the extant rules should not be extended to this practice, be it for CAT or Private operation.</p> <p>Question 4 p 28/32 below 4.5 Conclusion: comparison of options</p> <p>EASA writes: Other solutions are possible and stakeholders are invited do discuss them.</p> <p>Our opinion: This would seem to suggest that the development of this topic is insufficiently mature to merit an NPA. Was not a stakeholder review group tasked with this sort of work?</p>
response	<p>Refer to Section 1</p>

comment	<p>100 comment by: EUROCONTROL</p> <p>The EUROCONTROL Agency welcomes the publication of EASA Notice of Proposed Amendment 2017-19 on the 'Installation of parts and appliances that are released without an EASA Form 1 or equivalent'. It also thanks EASA for the opportunity that has been given to submit comments. However, the subject of the amendment is</p>
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considered outside the scope of activities of EUROCONTROL. In addition, despite the fact that it has no comments to make, the EUROCONTROL Agency would like to confirm that it will read with interest the comments on this NPA received from stakeholders and the responses given to them by EASA in its future comment-response document (CRD). Like for NPA 2017-19, EUROCONTROL staff will be given access to CRD 2017-19, for information.

response **Refer to Section 1**

comment 107

comment by: *FNAM*

FNAM (Fédération Nationale de l'Aviation Marchande) is the French Aviation Industry Federation/ Trade Association for Air Transport, gathering the following members:

- CSTA: French Airlines Professional Union (incl. Air France)
- SNEH: French Helicopters Operators Professional Union
- CSAE: French Handling Operators Professional Union
- **GIPAG: French General Aviation Operators Professional Union**
- GPMA: French Ground Operations Operators Professional Union
- EBAA France: French Business Airlines Professional Union

And the following associated members:

- FPDC: French Drone Professional Union
- UAF: French Airports Professional Union

The comments hereafter shall be considered as an identification of some of the major issues the French industry asks EASA to discuss with third-parties before any publication of the proposed regulation. In consequence, the following comments shall not be considered:

- As a recognition of the third-parties consultation process carried out by the European Parliament and of the Council;
- As an acceptance or an acknowledgement of the proposed regulation, as a whole or of any part of it;
- As exhaustive: the fact that some articles (or any part of them) are not commented does not mean FNAM and GIPAG have (or may have) no comments about them, neither FNAM and GIPAG accept or acknowledge them. All the following comments are thus limited to our understanding of the effectively published proposed regulation, notwithstanding their consistency with any other pieces of regulation.

Introduction

FNAM and GIPAG thank EASA for this proposal in airworthiness domain. The NPA 2017-19 answers to the need of proportional regulation, in particular by introducing



more flexibility for 'commercial' and imported parts. The effort done to adapt the regulation to Small and Medium Enterprises (SME) is welcomed by F NAM and GIPAG.

To ensure the aim of the NPA is reached, the dispositions need to be understood with a single and unique interpretation. In order to comment properly the proposed requirements, the stakeholders need to understand the whole proposition. All the more since SME are directly involved in this NPA. It can be a tricky work for SME to understand or interpret European regulations. Numerous points merit clarification.

F NAM and GIPAG fear it might create confusion on these points:

- The definition and the proper application of criticality levels
- The definition of an EASA Form 1 or equivalent

The EASA Form 1 equivalent should be described more clearly in order to inform properly maintenance organizations. Additionally, the holder may need guidance to assign the proper criticality level for each parts in a manner that leads not to over-categorize nor have a safety impact

To avoid any misunderstanding, F NAM and GIPAG ask to list concretely which parts and appliances are allowed to be manufactured without an EASA Form 1. A wrong interpretation of this disposition may have an impact on both safety and cost on maintenance organizations.

In order to ensure the NPA 2017-19's objectives, F NAM and GIPAG would like to have :

- Guidance for holder to assign properly CL to parts and appliances
- Clarification on the EASA Form 1 equivalents
- Clarification on which parts can be manufactured and installed by a Part-145 Organization without EASA Form 1

response **Refer to Section 1**

comment 119

comment by: ENAC

1) ".....However, it is acknowledged that requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary": Comment: agree with.

2) " The specific objective of this proposal is to provide industry with flexibility for the acceptance of parts and appliances with different production background for installation in an aircraft during maintenance" Comment: except for general aviation aircraft, for which category it is desirable to make the greatest alleviations possible, do you believe that passengers of a large aeroplanes/rotorcraft will be happy if they are aware that parts or appliances, which may have an impact on safety, are produced by organisations not under the oversight of the CA/EASA or the manufacturer of the aircraft?



3) "It is expected that by easing the manufacturing standards for certain parts (i.e. by not requesting an EASA Form 1 for all parts) used during maintenance, the cost of the related parts would decrease and this would in turn lead up to reduced maintenance costs for the aircraft owners". Comment: This sentence is not supported by a solid/realistic analysis. The difference may be more evident in a regime with same parts and appliances delivered with EASA Form 1 or without EASA Form 1. In such a case parts delivered without EASA Form 1 are surely cheaper. The paradox could be no economic benefit at all, when no EASA Form 1 or equivalent document is required.

response

[Refer to Section 1](#)

comment

127

comment by: *Luftfahrt-Bundesamt*

LBA is concerned about the use of EASA Form 1 during maintenance. The paragraphs M.A.613 and 145.A.55 are not being revised according to NPA 2017-19. Therefore, all components are to be released after maintenance using an EASA Form 1 (also after removal in serviceable condition). The newly revised AMC M.A.501(a) being named "Installation of components" states all of a sudden the purpose of the EASA Form 1 as only for CL I components after maintenance and removed in serviceable condition. In addition the revised 145.A.42(b) states that installation of components from third parties is only allowed with EASA Form 1.

The certificates to be expected after maintenance and for installation of used components should be consistent through all regulations. Otherwise one and the same component could exist being certified with EASA Form 1 and without and this creates a high risk of misunderstandings.

response

[Refer to Section 1](#)

comment

128

comment by: *CAA-NL*

General

CAA-NL generally supports initiatives to reduce the cost of aviation while not compromising safety. To reduce cost by not requiring an airworthiness release certificate for 'certain' parts before installation on 'certain' aircraft is a concept worth exploring. The additional cost of a Part 21 POA and the privilege to issue EASA Form ones, or the additional cost of obtaining a formal export certificate (FAA 8130-3) may well not be proportionate against the added safety assurance of those 'systems' for those parts. (see further our comment to the impact assessment)

However to replace a single simple system, one airworthiness release certificate for all parts with a complex system with 4 levels of criticality will not help solving this problem, specifically not for the GA community.



As mentioned above we have sympathy for the objectives of this NPA, but we do not see how the proposals will realise these objectives. Therefore we cannot support this NPA.

Possible ways forward:

- We suggest for non EU organisations to use more frequent the possibilities of the derogation of EU 748/2011 article 9(2) and publish the then accepted local forms used for releasing a part as AMC to M.A.501.

- Currently when the DAH includes the identification of standard parts in its Parts List / Parts Catalogue (PL/PC), e.g. NAS xxx or MS yyy (rivets or bolts) these parts can be installed on an aircraft based on a Certificate of Conformity to the NAS/MS etc. Similar principles could be used to include 'commercial parts' in the PC/PL when the DAH does not have any additional acceptance criteria to the quality criteria of the manufacturer of the commercial part. The DAH should include in its PL/PC (next to its own part-number) its equivalent commercial part number e.g. Philips lightbulb nr 'zzz' or Motorola chip 'abc'. In addition, these parts can be installed on an aircraft based on a Certificate of Conformity from the commercial manufacturer. Another option in line of this suggestion is to formulate a policy in line with FAA AC 21-45 and FAA AC 20-168. As all maintenance organisations and personnel use the PL/PC or are familiar with the FAA AC's this information would be available to all users.

- A third option is to cancel this proposal and start afresh with the possibilities to include declarations within the area of design and production that will come available with the new Basic Regulation to be published soon.

- Any combination of the above.

response **Refer to Section 1**

comment 131 comment by: *Fédération Française Aéronautique*

The FFA appreciates in all together the approach proposed in this NPA. We are convinced that in so far as the CL evaluation is professional, technical, objective and responsible, as described in the NPA, there will be no impact on safety.

In the current context where the General Aviation faces major economic difficulties, the significant benefit expected by the air operators/owners is obvious. It should revitalize the activity of the GA, a factor favorable to all the partners of the sector of activity.

Although the NPA does not specify it we understand that these new rules also apply to already certified airplanes.

response **Refer to Section 1**

comment 185 comment by: *NHF Technical committee*

NHF is positive to the change, as long as the system is very clear to the end-user. Technicians, technical records, and receiving personell will need to be trained in the different critical levels to be able to understand the system introduced.

response **Refer to Section 1**



comment	186	comment by: <i>Airlines for Europe (A4E)</i>
	<p>The NPA proposes to provide flexibility for the acceptance of parts and appliances with different production background for installation in an aircraft during maintenance. The main intent is to allow acceptance of certain parts without an EASA Form 1. However, the proposal is unnecessarily complicated. There is no need to introduce four different criticality classes for parts. The proposal should concentrate on a clear and unambiguous definition for parts not requiring the EASA Form 1, preferably with ample AMC/GM. We recommend to reduce the number of criticality levels to three or even two in order to keep it easy to implement. Thus, one for parts needing an EASA Form 1 and the others for parts without an EASA Form 1.</p>	
response	Refer to Section 1	
comment	187	comment by: <i>Airlines for Europe (A4E)</i>
	<p>This rulemaking proposal, when adopted, is for applicants for – and holders of an EASA Design Approval.</p> <p>A4E companies order a lot of parts (esp. in the US) from manufacturers and will order a lot of parts from organisations not holding an EASA design approval. How would EASA envisage the allocation of CL II, III and IV to parts by manufacturers that they have no control over? (unless the design holder of the aircraft takes the lead). Already now it is very difficult to get 8130-3 for commercially available parts, since most US manufacturers consider CoC equivalent to an 8130-3.</p> <p>In the interest of aviation safety we would advocate to harmonise as much as possible between FAA and EASA and prevent to unilaterally introduce criticality levels for parts and appliances. We encourage EASA to consider the views expressed by the FAA in AC 21-45 and try to arrive at a common understanding with FAA on “approved articles” (EASA Form 1, FAA 8130-3) and “acceptable articles” (standard parts, OEM standard parts, commercial parts, raw- and consumable material, all acceptable with CoC). This would greatly help maintenance organisations in the acceptance of new parts and appliances to be installed during maintenance.</p>	
response	Refer to Section 1	
comment	229	comment by: <i>Alexander KOBZAR</i>
	<p>We are proposing to limit the applicability of proposed amendment to CS-23 airplanes only. We are asking for this approach based on the possible impact on the safety level on Large airplanes.</p>	
response	Refer to Section 1	
comment	235	comment by: <i>Alexander KOBZAR</i>
	<p>CL description. Please, consider to use wording “... whose failure may ...” instead of “... whose failure would ...”</p>	
response	Refer to Section 1	

comment 246 comment by: *Swedish Transport Agency Civil Aviation Department*

Please be advised that the STA support the update of 1321/2014 and 748/2012 “Installation of parts and appliances that are released without an EASA Form 1 or equivalent” and do not have any further comments on NPA 2017-19.

response **Refer to Section 1**

comment 302 comment by: *UK CAA*

Attachment [#1](#)

Overall comments

1) We believe allowing parts affected by airworthiness requirements to be released and accepted onto aircraft with only commercial releases does not constitute a ‘high and uniform’ level of safety consistent with the Agency’s mission – it is a considerable reduction below those levels previously established by the constituent NAAs of the EU member states without any justification or comprehensive mitigation.

The major issue is with the classification of parts within the NPA. In order to ensure safety, those parts that are directly affected by the need to show compliance with airworthiness requirements (such as strength, flammability, crashworthiness etc.) should be supported by an Authorised Release Certificate/Airworthiness Approval Tag, in order to ensure conformity with the design data established by the design approval holder.

2) The NPA proposes in 21.A.309 a 4 layer classification process which we consider is unnecessarily complex. During the recent excellent presentation by John Van Doeselaar from Airbus at the global aviation manufacturing meeting, a slide was presented (attached) that provides a clear approach to classifying risk that could be adapted to determine the level of assurance needed and thus the type of release required.

Please see the attached slide

The criticality axis shows three levels:- Critical, Loaded and Non-Loaded.

Converting this approach into Part 21 release terms, could equate to:-

Critical – Part 21G + additional controls for critical parts in 21.A.139 b) 1) and 21.A.805 – i.e. EASA Form 1 + additional traceability/life information

Loaded – Part 21G – normal Part 21 QMS controls and standard EASA Form 1

Non-Loaded - Commercial parts for which an airworthiness release is not required.

3) The 4th layer of the NPA (CL IV) proposes “documentation accompanying the part identifying the part and the manufacturer” i.e. not requiring any Certificate of Conformity at all. This is considerably below the levels currently required even for Standard Parts and below that required for installation onto aircraft in the Military



sector in the United Kingdom. It is suggested that this is deleted, or in cases where truly commercial items without any conformity evidence are utilised in production or maintenance, it is stated that the means by which the POA holder/Maintenance Organisation can determine suitability for installation (such as flammability testing for commercial carpet, for example) must be defined in the instructions for continuing airworthiness produced by the Design Approval Holder.

The Rulemaking Group was provided with National Guidance Material established by several NAAs in dealing with commercial/role fits parts such as camera installations etc, the NPA does not show how these have been considered and addressed.

4) The basic conflict arises from Part 21 Subpart K requiring an EASA Form 1 for all parts installed on an aircraft other than Standard Parts, but GM to Part 21 Subpart G limiting eligibility for POA approval (and therefore ability to issue EASA Form 1s), excludes those organisations manufacturing parts identified in the design holder product support documentation as 'industry supply or no hazard'.

While this does not cause an issue in aircraft build, the fact that such parts were not initially supported by an EASA form 1 creates challenges during maintenance, unless the product support documentation is clear that a release is not required.

Please note: That since the initial release of JAR-21 in the 1990s, DOAs have already had the ability to identify those parts that do not require a Form 1 release and have generally not done so.

We believe the current approach set out in the NPA will not achieve its aims unless it is fully supported by the TC holders, there is the very real possibility that nothing will change for existing and future designs, as DOAs will simply specify Form 1s for all spare parts and the considerable work that has gone into the proposal will be wasted if it is not adopted in practice. Some further consideration should be given to addressing this apparent shortcoming.

5) We believe the Economic Impact statement on Page 27 that states that the effect is Zero or Minimal on the basis of a one-off activity to update procedures and templates is incorrect.

Firstly, there is a direct impact on NAAs that derive their income from the charging of fees. The eligibility of an applicant is significantly determined by the need to release an EASA Form 1 directly to end users. If the classification of parts requiring EASA Form 1 changes as proposed, then significantly less POAs will be required, which will have a direct and significant impact on income of affected NAAs and in some cases impact their ability to maintain the necessary resources to oversee remaining POAs.

Secondly, many POAs up to TC Holder level place reliance on the ability to obtain an EASA Form 1 from their supply chain, thereby alleviating the need to undertake supplier surveillance audits. With a significant reduction on the number of POAs, that burden of supplier surveillance will fall on the integrating POAs (i.e. Industry), with a significant increase in the expected levels of resource and associated inspection/audit travel costs to maintain the expected level of control.



Neither of these impacts appear to have been quantified and evaluated.

During the Global Manufacturing meeting, the FAA (who are broadly supportive of the proposal at a Policy) observed the reduction of POAs would not be an issue for control as the NAAs could simply audit the supply chain as the FAA does with its PAHs. The question is, with what resource? With the reduction of income as from the reduction in the number of POAs, some NAAs may not be able to maintain staff numbers to undertake such a task. During the separate discussion, representatives of some of the smaller NAAs advised that the effect of this proposal could make them economically unviable.

6) With regard to Standard Parts and previous Agency discussions (SIB 2012-06R2 and Certification Memorandum on use of Standard Parts in Critical Installations), the NPA does not seem to address these areas. Indeed, the first impression is that Standard Parts could be considered as CI IV, in which case they would not even justify a Certificate of Conformity.

We note that M.A.501 states that “Standard Parts shall only be fitted when accompanied by evidence of conformity traceable to the applicable standard” which has been left unchanged from the existing rule. This would mean that all Standard Parts should be Class III, which leads to the question “What class of Part is CI IV actually likely to apply to?”.

7) There are alleviations in place for sailplanes that provide a sensible fix for certain parts, it is not explained if this approach will be retained or why the concept could not be broadened to a larger group of General Aviation aircraft types.

8) The NPA only applies to new parts and will not apply to overhauled or repaired parts. This could result in parts that did not require a Form 1 needing to be provided with a Form 1 when the part is maintained in a workshop. It doesn't appear to be logical to apply the classification concept to new parts and not to refurbished or maintained parts.

The UK CAA is willing to expand further on our comments and to participate in any meeting arranged to further progress the content of this NPA.

response **Refer to Section 1**

comment **343** comment by: *Federal Aviation Administration*

General Comments and Questions

If the rule is adopted, will there be an expectation by EASA MROs for a U.S. Part 145 repair stations with an EASA supplement for parts supplied from an U.S. PAH with a 8130-3 (equivalent Form 1 with CL1) or a Certificate of Conformance (equivalent EU CoC with CL 2 or CL3 statement) to include a CL statement?

For example, a statement, "This part is CL1" statement in Block 12 of an FAA Form 8130-3 or Certificate of Conformance. Additionally, will there still be an export requirement for criticality statements for PMA parts as required by the TIP?



Production approval holders in both the U.S. and EASA are required have procedures that ensure that approved engineering, at the proper revision level, to manufacture parts. Under this proposal, there is an opportunity for companies that do not have approved data through a licensing agreement to reverse engineer parts and produce them for sale. In the case of CL III parts (which could lead to the use of emergency procedures), this is a potential safety concern.

This proposal allows manufacturers of EASA CL II, III, or IV to be produced in a facility with a recognized quality system, but not an EASA production approval. In theory, this would allow a US supplier to manufacturer replacement parts without benefit of an FAA production approval (PMA or TSO), contrary to 14 CFR 21.9. Section 21.9 prohibits U.S. manufacturers from producing a part that they know, or should know, will be installed on a type-certificated product, without having a production approval. This prohibition is not restricted to U.S. type-certificated products. This would bestow and unfair economic advantage to manufacturers in other countries.

It is unclear if this proposed amendment will allow EASA to maintain compliance with ICAO Annex 8 chapter 2 paragraph 2.4.1 requirements. Paragraph 2.4.1 states “When approving production of an aircraft, engine, propeller or associated part, the contracting state having jurisdiction over the organization responsible for production shall: A) examine the supporting data and inspect the production facilities and processes so as to determine that the manufacturing organization is in compliance with the appropriate production requirements; and B) ensure that the manufacturing organization has established and can maintain a quality system or a production inspection system such as to guarantee that each aircraft, engine, propeller or associated part produced by the organization or by sub-contractors and/or suppliers is airworthy at the time of release”. Note #1 states, “Normally, the oversight of production is facilitated by approving the manufacturing organization.” Without a POA, how does the CAA meet this requirement?

response **Refer to Section 1**

comment 346 comment by: *European Sailplane Manufacturers*

The European sailplane manufacturers appreciate the possibility that certain parts not considered to be critical for flight might become eligible for installation even if no Form 1 may be issued for this part.

We concur with the concept that different criticality levels may help to identify the level of conformity documentation coming with this part.

As is well known, for sailplanes such a flexibility provision was already introduced into the AMC 21.A.303(c) “Standard Parts” where certain, non-required and non-critical parts were accepted for installation into a sailplane without requiring a Form 1. After introduction of this AMC in 2006, the sailplane community (manufacturers, maintainers, operators, pilots) made excellent service experience and the offered flexibility was appreciated and used by all stakeholders involved.

Therefore it is nice to see, that such a possibility to have parts installed without a Form 1 is now also considered for all aircraft (and not lonly limited to sailplanes).

response **Refer to Section 1**

comment 377 comment by: *Embraer S.A.*



	The NPA says that there will be impacts in current BASAs, however, it does not state if these agreements will be revised to address the acceptance of parts without EASA Form 1. Without these agreements being implemented beforehand, it is likely that the implementation of this concept will cause problems.
response	Refer to Section 1
comment	<p>383 comment by: <i>MTU Aero Engines AG</i></p> <p>In the commercial business MTU Aero Engines AG is mainly a production and maintenance organisation for engines and components. For that kind of product we do not see a need or benefit in the prosed amendment. In most cases the non-standard parts are engine type specific and production and maintenance sources are limited (e.g. to avoid SUP). Introduction of CL level I to IV with different requirements regarding the release documents would result in more complex processes in the supply and incoming inspection areas. We understand that the proposal makes sense for such products as mentioned in the NPA (light bulbs, fire axes, smoke detectors), but have objections against implementation for engines. We believe that it is quite unlikely that an engine TCH will introduce this system, however it should be clearly stated in the final rule, that engines components except standard parts can only be produced by POA holder or suppliers under control of POA holder.</p>
response	Refer to Section 1
comment	<p>384 comment by: <i>Safran Aircraft Engines</i></p> <p>When talking about “higher” CL in the document, the word “higher” would have been expected to be linked to the idea of “more critical”. However, the opposite has been retained, which is misleading the reader (e.g. CL II is higher than CL I whereas CL I is more critical than CL II).</p>
response	Refer to Section 1
comment	<p>385 comment by: <i>070287</i></p> <p>In general this NPA is acceptable, however from a Supply Chain Prospective i'd like consideration on such products as Exterior placrads / Electronic Flight Bags (AMC 20-25) / Safety Equipment i.e First Aid kits and Megga phones etc.</p> <p>I'd like to also know how this effects the US & TCCA bilateral mutual agreements in acceptance of parts, also would this rule change EASA Part 145.A. 42 " Fabrication" of parts during maintenace.</p>
response	Refer to Section 1
comment	<p>386 comment by: <i>Bob Wilson</i></p>

The stated objective of the NPA is fully supported.
 However, I am concerned that as stated in several places in the NPA it is an option for a DAH to assign CLs and this is particularly clearly stated on Page 27 at paragraph 4.4.4 which includes the statement: "The NPA proposes that DAH would still have the right not to assign CLs and in such case, all new parts to be installed during maintenance would require and EASA Form 1....."
 It is considered likely that some (many?) DAHs will consider it is not in their business interests to invest time and money to assign CLs. In this event as stated in the NPA, EASA Form 1s will still be required and this will have a marked negative effect on the intended benefits of the NPA.

response **Refer to Section 1**

comment 398 comment by: DGAC France

The proposed system by this NPA opens the possibility, for a very large panel of parts, of being largely based on labels of non- approved organisations by competent authorities, with or without aviation standard, such organisations would have labels delivered and maintained by private bodies and never controlled by competent authorities (and therefore that cannot be revoked). This could unbalanced strongly the current EU stable/ control system based mainly on EASA basis approved organisations and managed through compliance monitoring system and, in future times, through Safety Management System. Moreover, the NPA should describe more precisely advantages/inconvenient of the Certificate of Compliance solution compared to the Form1 certificate for specific parts. For instance, if there is no contract between the DOA and the manufacturer of the part (which is not Part 21 approved), we would have no guaranty for this manufacturer to receive last data revision on the considered part, no insurance of an inspection from independent authorities within the structure of such manufacturer, and no occurrence reporting within the production process, therefore the quality level of produced parts could be potentially directly impacted. Item 4.4.1 of the NPA mentions that there is no negative safety impact expected, DGAC would like to have a more detailed assessment of this issue.

Having said that, DGAC France believes that a 4-level-system (and even more if standard parts are still covered by this NPA), could bring complexity and somewhere potential negative safety impact.

Therefore DGAC France is not in favor of this NPA as proposed but would be keen to consider a 3-level-system (with Form 1, commercial parts and standard parts), as it already exists in some other countries, as in the US

response **Refer to Section 1**

Title

p. 1

comment 16

comment by: Yuksel Kenaroglu



response	<p>This NPA seems as "Maintenance Activities" oriented. It is assumed that similar part replacement/part installation scenarios would be applicable in the aircraft manufacturing processes. If the scope of this NPA includes Maintenance Activities only, this should be stated in the title. Otherwise, aircraft manufacturing processes related "parts/appliance usage" scenarios should be considered, also. This NPA review has been carried out under this main viewpoint.</p>
	<p>Refer to Section 1</p>
comment	<p>22 comment by: <i>Yuksel Kenaroglu</i></p> <p>This NPA assumes that the subject parts or appliances will be installed on the assembly or aircraft during <u>maintenance, only</u>. This NPA (and new rules) may be applicable to the Aircraft Manufacturers (Production Approval Holders-POA's), or a System/Subsystem Manufacturers, also. In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only. The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.</p>
response	<p>Refer to Section 1</p>
comment	<p>23 comment by: <i>Yuksel Kenaroglu</i></p> <p>This NPA assumes that the subject parts or appliances will be installed on the assembly or aircraft during <u>maintenance, only</u>. This NPA (and new rules) may be applicable to the Aircraft Manufacturers (Production Approval Holders-POA's), or a System/Subsystem Manufacturers, also. In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only. The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.</p>
response	<p>Refer to Section 1</p>
comment	<p>24 comment by: <i>Yuksel Kenaroglu</i></p> <p>This NPA assumes that the subject parts or appliances will be installed on the assembly or aircraft during <u>maintenance, only</u>. This NPA (and new rules) may be applicable to the Aircraft Manufacturers (Production Approval Holders-POA's), or a System/Subsystem Manufacturers, also.</p>

response	<p>In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only. The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.</p> <p>Refer to Section 1</p>
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comment	<p>27 comment by: Yuksel Kenaroglu</p> <p>Because of the editing and saving problems I have encountered on this comment page, please disregard all other comments except the one in bold letteres, below:</p> <p>This NPA assumes that the subject parts or appliances will be installed on the assembly or aircraft during maintenance, only.</p> <p>This NPA (and new rules) may be applicable to the Aircraft Manufacturers (Production Approval Holders-POA's), or a System/Subsystem Manufacturers, also.</p> <p>In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only.</p> <p>The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.</p> <p>Refer to Section 1</p>
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comment	<p>28 comment by: Yuksel Kenaroglu</p> <p>Because of the editing and saving problems I have encountered on this comment page, please disregard all other comments except the one in bold letteres, below:</p> <p>This NPA assumes that the subject parts or appliances will be installed on the assembly or aircraft during maintenance, only.</p> <p>This NPA (and new rules) may be applicable to the Aircraft Manufacturers (Production Approval Holders-POA's), or a System/Subsystem Manufacturers, also.</p> <p>In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only.</p> <p>The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.</p> <p>Refer to Section 1</p>
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comment

29

comment by: Yuksel Kenaroglu

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In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only.

The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.

response

Refer to Section 1

comment

30

comment by: Yuksel Kenaroglu

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In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only.

The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.

response

Refer to Section 1

comment

31

comment by: Yuksel Kenaroglu

Because of the editing and saving problems I have encountered on this comment page, please disregard all other comments except the one in bold letteres, below:

This NPA assumes that the subject parts or appliances will be installed on the assembly or aircraft during maintenance, only.



<p>response</p>	<p>This NPA (and new rules) may be applicable to the Aircraft Manufacturers (Production Approval Holders-POA's), or a System/Subsystem Manufacturers, also. In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only. The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.</p> <p>Refer to Section 1</p>
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<p>comment</p>	<p>25 comment by: <i>Yuksel Kenaroglu</i></p> <p>This NPA assumes that the subject parts or appliances will be installed on the assembly or aircraft during <u>maintenance, only</u>. This NPA (and new rules) may be applicable to the Aircraft Manufacturers (Production Approval Holders-POA's), or a System/Subsystem Manufacturers, also. In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only. The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.</p> <p>Refer to Section 1</p>
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<p>comment</p>	<p>26 comment by: <i>Yuksel Kenaroglu</i></p> <p>This NPA assumes that the subject parts or appliances will be installed on the assembly or aircraft during <u>maintenance, only</u>. This NPA (and new rules) may be applicable to the Aircraft Manufacturers (Production Approval Holders-POA's), or a System/Subsystem Manufacturers, also. In this NPA there may be an assumption that POA's are allowed installing EASA Form-1 issued parts only. The parts usage freedom that Criticality Level concept brings, may be applicable to not Aircraft Maintenance Area, but Aircraft Manufacturing and/or integration area, also.</p> <p>Refer to Section 1</p>
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<p>comment</p>	<p>40 comment by: <i>Yuksel Kenaroglu</i></p> <p>Just for a "saving function test" requested by</p>
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	"Nikólaos ANAGNOSTOPOULOS on behalf of CRT European Aviation Safety Agency (EASA)"	
response	Refer to Section 1	
comment	41	comment by: <i>Yuksel Kenaroglu</i>
	Just for a "saving function test" requested by "Nikólaos ANAGNOSTOPOULOS on behalf of CRT European Aviation Safety Agency (EASA)"	
response	Refer to Section 1	
comment	42	comment by: <i>Yuksel Kenaroglu</i>
	Just for a "saving function test" requested by "Nikólaos ANAGNOSTOPOULOS on behalf of CRT European Aviation Safety Agency (EASA)"	
response	Refer to Section 1	
comment	43	comment by: <i>Yuksel Kenaroglu</i>
	Just for a "saving function test" requested by "Nikólaos ANAGNOSTOPOULOS on behalf of CRT European Aviation Safety Agency (EASA)"	
response	Refer to Section 1	
comment	44	comment by: <i>Yuksel Kenaroglu</i>
	Just for a "saving function test" requested by "Nikólaos ANAGNOSTOPOULOS on behalf of CRT European Aviation Safety Agency (EASA)"	
response	Refer to Section 1	
comment	45	comment by: <i>Yuksel Kenaroglu</i>
	Just for a "saving function test" requested by "Nikólaos ANAGNOSTOPOULOS on behalf of CRT European Aviation Safety Agency (EASA)"	
response	Refer to Section 1	
comment	135	comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>



The sentence: 'this NPA proposes to assign a criticality level (CL) for each part based on the safety consequences should the part fail to meet its design standards.' is misleading: Each certification process covers already a safety assessment, but it does not compensate any quality assurance activity required at the time of manufacturing. Whether EASA Form 1 or not is necessary to attest 'adequate manufacturing quality' should be defined without involvement of design data. Design data is created under the jurisdiction of the State of Design at the time of certification, while the manufacturing quality scenario is potentially affected for a longer period of time after certification. Requirement for EASA Form 1 is any way specific for EU law countries/POAs and not world-wide template. In the US system (ref. tim.shaver@faa.gov), a draft Notice allows U.S. repair stations to perform a part 43 inspection and issue Form 8130-3 with a right-side signature for new Commercial Parts and COTS parts received without an Authorized Release Document (ARD). The repair station must establish (1) traceability to an approved design (rather than to a production approval holder) and (2) suitability for installation. The EU system should align with that approach as it would be in line with ICAO Annex 8 and would ensure equal level of playing field.

response **Refer to Section 1**

comment 136 comment by: *Rolls-Royce Deutschland / DOA Manager D. Stege*

Up to now the certification process is deemed to ensure the product design meets the applicable (technical) airworthiness standard (i.e. CS-X). A statement like 'Minimum manufacturing and release certificate requirements based on industry standards depending on the CL assigned to each part' may lead to the interpretation that an EASA Type Certificate will in future guarantee minimum logistical effort and cost. That's not the intent of ICAO Annex 8 defining the obligations of State of Design, State of Manufacturing and State of Registry. Please re-consider the proposed CL concept! The decision whether an EASA Form 1 is required or not should be with the recipient of the part and not with the design approval holder! See US concept.

response **Refer to Section 1**

comment 137 comment by: *Rolls-Royce Deutschland / DOA Manager D. Stege*

The ToR was requesting a focus on 'commercial parts', which means 'parts that are not designed or manufactured specifically for aviation use' and to propose for that design data CL assignment seems unrealistic. The ToR already quotes 'The Agency recognizes that it is unrealistic to expect manufacturers making thousands of non-aviation parts per day and relatively few aviation parts to obtain a Production Organisation Approval (POA) allowing them to issue a Form 1.', but it can be expected that happens for commercial part design data containing CL info in future?

response **Refer to Section 1**

comment 211 comment by: *Laurent Lalaque*

Although the intent seems to allow mainly the "so-called commercial parts" to be released without EASA Form 1, this NPA allows in fact any part of critically level other than CL I to be released without EASA Form 1. There would be commercial pressures



on the design approval holders from their customers, which would force these holders of design approvals to assign criticality levels other than CL I to many parts. This would clearly lower the reliability of the products, by decreasing the manufacturing precautions on those parts and would affect negatively the airworthiness of the aeronautical products.

response **Refer to Section 1**

comment 372 comment by: HEICO Aerospace

HEICO Comment 1 – Criticality Level - Various Locations
 Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”

As appropriate, replace “Critical” with “Safety Sensitive.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

comment 395 comment by: Aviation Suppliers Association

We have two different sets of comments embedded in this CRD. First, we offer comments to try and improve the documentation approach. But second, we also object to the proposal that certain parts be identified as needing lower levels of production approval scrutiny, and recommend that those features be removed from the NPA before it becomes a final rule.

1. Using CLs to Guide Documentation Standards

Under the proposed NPA, Design Approval Holders are tasked with assigning the CL to every part and article in a design. The default, should they elect not to make such CL determinations, is to default to CLI.



We fear that this default will become the norm. We fear that many design approval holders will not go through the effort of categorizing every part. Past practice has shown that design approval holders simply do not have the data, the time, the resources, or the desire to undertake this process for existing designs.

There is precedent for this approach that should be examined as a cautionary tale.

The FAA permitted design approval holders to designate Commercial Parts. The mechanism was quite similar to the lowest classification in this NPA (without a need to designate CLs 1-3).

Like this NPA, the FAA's effort was voluntary. The design approval holder community (which includes European companies holding FAA validated TC as well as US TC holders) largely ignored this opportunity.

There were several reasons for this. First, creating such a list required the resources of the DAH to review parts and determine which could be added to the commercial parts list. These resources are necessary because typically type certificate applicants develop data at a systems level, and not at an individual parts level.

Second, there was typically no benefit or profit to the DAH for doing so. The commercial parts were already part of the approved design, and the FAA was not enforcing the regulations with respect to those parts, so there was no reason for the DAHs to expend the time and financial resources to develop the list.

Third, the commercial parts list was not made mandatory, just as assigning CLs is not mandatory under the NPA (the parts all default to CLI). We believe that a program like this will not succeed unless it is mandatory for design approval holders to make and publish the designations.

And finally, the data to easily and quickly assign parts to the commercial parts list did not exist. That same data would be necessary to make CL assignments, and that same data still does not exist (so engineering resources would have to be expended to create that data).

One remedy would be to make CL designation a mandatory exercise - each design approval applicant and holder would be required to make such designations. Another remedy would be to base CL designation on objective standards, such that any person could identify the CL level, and thus there would be no penalty to the industry if a manufacturer did not designate CLs (because *a priori* designation would be unnecessary). Another advantage to such objective standards would be that it would make it easy for the industry to identify the 'right' documentation standards for parts without having to seek guidance from a critical parts list that might be incomplete or out-of-date.

2. Using CLs for Production Approval Levels



We believe that the proposal to lower production approval standards based on criticality lists may lower safety standards unnecessarily. Under the proposal, there would be no direct CAA oversight of the production of CL2-CL4 parts. Only CL1 parts would have to be produced under a government production approval. This seems to be an abrogation of the state duties under ICAO norms. *E.g. Chicago Convention, Annex 8, Part II, section 2.2.1.*

We would expect some more rigor in any proposal to alter EASA's method of compliance to the ICAO standards. In particular, there appears to be no evidentiary basis for the conclusion that production approval standards need to be altered, nor is there any discussion supporting a conclusion that the alteration achieves an equivalent level of safety.

The proposal also fails to offer CAAs any alternative practices in order to allow them to ensure conformity for CL2-CL4 parts. This is, once again, an apparent abrogation of state duties under the Chicago Convention.

States also have a duty to set clear standards for compliance. The ability of the design approval holder to assign CL level and thereby assign compliance mode (set the production approval requirement for that part) means that the design approval holder is effectively setting the regulatory compliance standards for other parties. This seems to be an abrogation of the state's obligation to regulate parties.

Finally, there appears to be a dangerous possibility of misuse of this proposal for competitive gain at the expense of safety. Design approval holders have the authority to assign higher CL levels to parts. This means that a design approval holders could assign CL1 to a standard part. This could happen even if the part met the criteria for CL4. This might effectively put the standard part producer out of business, thus shifting the power to produce that part to the PAH from the standard part producer. It seems unwise to create a mechanism that permits this sort of market manipulation.

For these reasons, we would advise dropping proposed changes to production approval standards until these issues could be addressed in a robust manner, and until the EU's compliance with Annex 8 of the Chicago Convention can be considered.

response [Refer to Section 1](#)

comment 409 comment by: PPL/IR Europe

PPL/IR Europe welcomes the focus on proportionality. The inflexibility of the EASA regime for requirements for parts is one of the key contributors to the disproportionality for GA that the GA Safety Strategy and GA Roadmap seeks to address. While this NPA does not go far enough, as we will set out in our comments, it is a step in the right direction.

response [Refer to Section 1](#)

comment 419 comment by: MARPA



Review and Analysis to Establish Appropriate CL is Unlikely to Occur

Under the proposed NPA, Design Approval Holders are tasked with assigning the CL to every part and article in a design. The default, should they elect not to make such CL determinations, is to default to CLI. The result of this policy will inevitably be that all parts—even standard parts and “commercial” parts—will be defaulted to CLI, because history has shown that it is unlikely a DAH is going to voluntarily undertake the effort of categorizing every part. The DAHs simply do not have the data, the time, the resources, or the desire to undertake this process. The industry knows this, because the industry has seen a similar effort fail before.

The FAA previously attempted a similar DAH-driven classification for Commercial Parts. The FAA attempted to develop a commercial parts list for those parts that were manufactured without a production approval due to their wide-spread general use, and non-aviation specific intent. This was intended to work around the requirement that persons manufacturing articles that they knew would be installed on a type certificated product were required to manufacture under a production approval. This was intended to be a benefit for Design Approval Holders; the same Design Approval Holders that will be expected to develop CL categories. This group included both US TC holders and European companies holding validated FAA TCs. None of the DAHs took advantage.

There were several reasons for this. First, it required the resources of the DAH to review commercial parts and determine which should be added to the commercial parts list. Second, there was no benefit or profit to the DAH for doing so. The commercial parts were already part of the approved design, and the FAA was not enforcing the regulations with respect to those parts, so there was no reason for the DAHs to expend the time and financial resources to develop the list. Third, the commercial parts list was not made mandatory, just as assigning CLs is not mandatory under the NPA (the parts all default to CLI). And finally, the data to easily and quickly assign parts to the commercial parts list did not exist. That same data would be necessary to make CL assignments, and that same data still does not exist.

If DAHs do not assign CLs to parts and appliances there will be two options left. The first, allow all parts to default to CLI. This would be counterproductive as it would result in even the most non-safety-sensitive parts and articles being treated as the most critical and thus requiring EASA Form 1s. The second option would be for EASA to assign CLs to all parts and appliances, but EASA clearly lacks the substantial resources required for such an undertaking.

Another alternative would be to make the NPA mandatory (although we do not recommend this path). Each design approval holder (and future applicants) would be required to make all appropriate CL designations (and make those designations publicly available). Yet another alternative would be to create objective standards upon which CL designations are based, thus allowing any person to identify the CL level of a given part without having to rely upon previously assigned designations by the DAH, which may or may not have been made. This is similar to the manner in which export control regimes like the Wassenaar Arrangement function, by establishing objective criteria for categories into which articles fit.



	<p>Because of the industry’s experience with commercial parts, and the similarities to the CL initiative, we recommend that EASA abandon this NPA.</p>
response	<p>Refer to Section 1</p>
comment	<p>420 comment by: MARPA</p> <p><u>The Term "Criticality Level" is Confusin and should be Revised</u></p> <p>The term “criticality level” is a new designation for four different categories of parts and is used widely throughout the NPA. The history of the use of the words “critical” and “criticality” in aviation regulations is a checkered one that has caused much confusion and headache within the industry. Rather than add yet another use of the word “critical” (and “criticality”) to an already confused history, MARPA recommends replacing the term with a different phrase that is 1) clear and 2) not laden with a past history of usage.</p> <p>After coordinating with other industry colleagues and commenters, we recommend replacing the term “criticality level” with the term “category level.”</p> <p>The term “critical” in conjunction with terms like “part” and “component” has been used in a variety of different ways. EASA’s website recognizes that a “general definition does not exist” but that there are currently “basically three different definitions.” See FAQ n.19013, available at https://www.easa.europa.eu/faq/19013. Adding a new term “criticality level” would likely add to this confusion. This is problematic for two reasons.</p> <p>First, it may simply add to the confusion that three definitions using the word—one for rotorcraft, one for engines, propellers and APUs, and one in the US-EU bilateral—already creates. Adding a fourth definition further dilutes and muddles the word, and without a single clear and concise definition it becomes difficult for the industry to understand what is expected of them when the word appears.</p> <p>Second, the distinction of “critical” and “non-critical” with respect to PMA is also sometimes a source of confusion. By assigning the word “critical” (or, more specifically, its variant “criticality level”) to all parts, there is a very real risk that operators, regulators, and especially competitors may either inadvertently or deliberately misconstrue the categorization of the various “criticality levels” I-IV as meaning that ALL parts are in some way “critical,” as they have been assigned a “criticality level.” This could cause confusion as to which PMA parts can be accepted under the bilateral and TIP without further showing (all non-critical PMA parts), and which require an EASA STC (only those PMA parts that are “critical”). It would unfortunately be very easy for someone who is not familiar with the TIP and the bilateral to look at a PMA part that is assigned CL II, CL III, or even CL IV and assume that because it has been assigned a “criticality level” that it is a “critical” part and thus required an EASA STC under the terms of the TIP.</p> <p>This is clearly not the intention. Thus we recommend replacing the term “criticality level” with the term “category level.” The revision achieves the same function by categorizing parts into four segments based upon their potential failure modes and</p>

effects, but without using the often-problematic word “critical.” The term “category level” also has the benefit of retaining the same “CL” abbreviation (in the English translation).

Finally, there is a benefit to using the new phrase “category level” in place of the term “criticality level.” This effort to categorize parts based on failure modes in order to determine release documentation requirements is a new one. It therefore makes sense to offer a new term, rather than a term that is already in use and brings with it a history of interpretation (especially a problematic history, like “critical”). A new term will allow those using and implementing the new process to embrace it openly without any preconceived notions or deeply seated understandings about what the term “criticality” already means, which could ultimately adversely affect the adoption of the new policy.

We therefore recommend replacing the potentially confusing term “criticality level” with the new term “category level.”

response [Refer to Section 1](#)

comment

430

comment by: ARSA

[Attachment #2](#)

Summary

NOTE: IN ADDITION TO COMMENTING IN THE PERTINENT SEGMENTS OF THIS NPA, ARSA IS ALSO UPLOADING A STANDALONE DOCUMENT SO EASA CAN BETTER EVALUATE THE ASSOCIATION'S POSITION ON THIS IMPORTANT ISSUE. WE NOTE THE COMMENT RESPONSE TOOL (CRT) CONTAINS A STATEMENT THAT COMMENTS SUBMITTED IN THIS MANNER THROUGH THE "ADD FILE" FEATURE WILL NOT BE CONSIDERED. WE BELIEVE THIS IS AN ILL-ADVISED POSITION. THE CRT'S RIGID STRUCTURE MAKES IT DIFFICULT TO ADDRESS CERTAIN POINTS, SUCH AS PROPOSING AMENDMENTS TO RULES AND/OR GUIDANCE THAT WERE NOT MENTIONED IN THE NPA.

While ARSA supports the intent behind the NPA, the current version unnecessarily complicates EASA regulations by creating definitions of a part’s criticality for maintenance purposes that are different from those included in the approved design.

Additionally, the proposal vests complete discretion in the design approval holder (DAH) to determine whether to conduct a criticality assessment for parts to be installed during maintenance. If a DAH elects not to evaluate its parts as proposed, no meaningful change will result in the Agency’s documentation requirements. The requirement for all new parts to be accompanied by a Form 1 would continue—basically, defeating the purpose of the NPA and the agency’s effort entirely.

Therefore, the association strongly urges EASA to use three categories of parts in determining the required documentation for installation during maintenance activities. (Unless otherwise noted, all references to parts, components or articles in these comments pertain to **new** replacement or modification parts intended for installation during maintenance.)



1. Critical parts that would require an EASA Form 1. Critical parts are those for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section or certification maintenance requirements of the manufacturer's maintenance manual or Instructions for Continued Airworthiness. During certification, the design approval holder (DAH) and the Agency determine which parts are critical and this definition should control for purposes of this rulemaking.
2. Non-critical parts, if produced under Part-21, subpart F (Production without Production Organization Approval) or subpart G (Production Organization Approval for Products, Parts and Appliances) would have to be accompanied either by an EASA Form 1 or another document certifying that the article was produced in accordance with a production inspection system or production quality system, as applicable.
3. Parts not accompanied by a Form 1 (or another document described in point 2, above) may be installed during maintenance only if they are traceable to an approved design as reflected in the design or maintenance data (e.g., drawings, specifications, Instructions for Continued Airworthiness, Component Maintenance and Overhaul Manuals, Illustrated Parts Catalogue, Illustrated Parts List, Illustrated Provisioning Documents or other data approved by the Agency). The latter category would include the vast majority of standard parts as defined by the Agency, manufacturer's standards not meeting the Agency's definition of standard part and commercial-off-the-shelf (COTS) parts as defined herein.

ARSA commends EASA for recognizing that requiring a Form 1 for all new parts installed during maintenance is "unnecessary and onerous." That recognizes the fact that regardless of the documentation provided, the installer must ensure an article conforms to the approved design and is in condition for safe operation. This is accomplished by reviewing the available documentation, any identification data or marking on the part, its physical condition and suitability for installation in the next higher assembly. These actions occur in accordance with the incoming or receiving procedures of the approved maintenance organization and again when maintenance personnel obtain the parts issued from inventory and make the fitment on the product or article.

EASA specifically references COTS parts that are not produced for aviation but are included in many EASA-approved designs. By not recognizing these items in its regulations EASA has no mechanism to except them from the EASA Form 1 requirement. Most COTS parts installed during maintenance are produced outside the production organization approval (POA) holder's quality system. Often, they are obtained from distributors. Consequently, COTS parts arrive at maintenance organizations without an EASA Form 1. ARSA believes they are regularly installed following a determination by a qualified organization that they are airworthy.

Specific Issues

The NPA would fundamentally change Part-21 by eliminating the need for an EASA Form 1 in most cases, which in essence would dramatically reduce the number of parts for which the POA holder would be responsible. Instead, the agency would



rely primarily on recognized industry quality management systems to govern the production and documentation of most parts used in maintenance and modification activities. While the NPA is consistent with the emphasis on implementing risk-based approaches to regulatory oversight, it should not give DAHs *carte blanche* responsibility for determining documentation requirements for parts installed in maintenance and alteration activities. The responsibility for design and production must remain with the DAH/POA holder. The responsibility for determining fitment during maintenance and alteration is the purview of the maintenance provider and the owner/operator.

Second, the NPA significantly (and unnecessarily) increases regulatory complexity by creating four criticality levels that apply only to articles installed during maintenance and modification. The proposed levels are materially different from those that apply during a certification project where a critical part is required to be identified -- "... by the design approval holder (DAH) during the product certification process or otherwise by the Authority for the State of Design (SoD). Typically, such components include parts for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section or certification maintenance requirements of the manufacturer's maintenance manual or Instructions for Continued Airworthiness."

The definition of critical already exists in EASA certification specifications and in bilateral aviation safety agreements.^[1] ARSA proposes that EASA use the international definition of critical part for this rulemaking. It is more encompassing than the definition used in some of the Agency's certification specifications^[2] and it harmonizes with its international partners.

Third, the NPA does not require design approval holders (DAHs) to assign criticality levels to replacement or modification parts. The NPA states that if a DAH does not assign criticality levels for parts to be used during maintenance all parts included in the type design (except those already excepted) will continue to require a Form 1. Many DAHs will simply choose the status quo. DAH's already have established systems and procedures to identify "critical" parts under the certification requirements. Additionally, many have procedures for issuing the Form 1 from their main POA holder facilities. Relief from COTS parts and manufacturer standard parts will not carry the proper incentives and the Agency will have lost an opportunity to address the parts documentation conundrum.

Having the DAH make the criticality assessment will produce the same result as when the FAA amended part 21 to include a definition of commercial parts. U.S. DAHs have largely ignored the ability to designate articles as commercial parts because compliance is duplicative and discretionary. The FAA rule is redundant and imposes administrative burdens on the DAH by requiring another assessment of whether the part's failure would degrade the level of safety of the product, an assessment already made during the certification process.

The FAA's definition of commercial parts also creates confusion because COTS parts represent the vast majority of non-standard parts. While COTS parts used during maintenance and modification are produced outside a Part-21 production inspection system or quality system, they are traceable to an approved design, usually through the applicable maintenance data.



ARSA's proposal is relatively straightforward. It creates three categories of parts for use during maintenance and modification, each with objective standards for determining the required documentation. Critical parts are already defined and understood in the context of the design, production, operation and maintenance rules. That definition should be used rather than creating another mechanism for determining a part's criticality. The second category, i.e., those traceable to Part-21, subparts F or G, would have to be accompanied either by a Form 1 or another document evidencing that it was produced under Part-21. All other parts would fall into the third category and could be installed following a determination that they were traceable to an approved design. This includes standard parts as defined by EASA, manufacturer's standards not meeting the Agency's definition of standard part and COTS parts as defined herein.

ARSA appreciates the opportunity to comment on this important rulemaking proposal. While it supports the Agency's intent to limit the number of parts for which a Form 1 would be required, the association is concerned that the proposal is too complex and vests too much authority in the DAHs.

ARSA believes it has proposed a workable solution that (1) requires a Form 1 for all critical parts as defined in the design rules, (2) for non-critical parts, makes issuance of a Form 1 discretionary with a Part-21 subpart G or subpart F manufacturer, (3) for non-critical parts allows another document to be used in lieu of a Form 1 if it states that the article was produced under a Part-21 inspection system or quality system as applicable, and (4) allows maintenance providers to install parts that are not described above if they can establish a link to an approved design.

[1] See the definitions section of the Technical Implementation Procedures between the FAA and EASA.

[2] For example, CS 27.602 and CS 29.602 define critical part -

(a) ... as a part, the failure of which could have a catastrophic effect upon the rotorcraft, and for which critical characteristics have been identified which must be controlled to ensure the required level of integrity.

(b) If the type design includes critical parts, a critical parts list shall be established. Procedures shall be established to define the critical design characteristics, identify processes that affect those characteristics, and identify the design change and process change controls necessary for showing compliance with the quality assurance requirements of Part-21.

response

Refer to Section 1

Applicability and timeline

p. 1

comment

1

comment by: *Yuksel Kenaroglu*



	<p>In this section of NPA "Action Area" is stated as "Maintenance Organisations". If this NPA does not include Design and Manufacturing Organisations in this scope, this position may be stated here or at the another related section. When we remember the obligation of the Maintenance Organisation that requires obeying the rules that had been designated by Designer, using parts that don't have EASA Form-1 may be applicable to Designer and Manufacturer also ! (Shortly, "action area" may include both Designers and Manufacturers. Otherwise, this situation (Maintenance Organisations) should be reflected at the Title, also.)</p>
response	<p>Refer to Section 1</p>

Table of contents	p. 2
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comment	<p>49 comment by: <i>Lantal</i></p> <p><i>"More responsibility would be given to design organisations that would be able to propose the CL and to certain manufacturing organisations that would not require oversight by CAs but only compliance with industry standards, which are typically recognised worldwide. Therefore, this would facilitate collaboration with manufacturing organisations located in geographical regions subject to different rules".</i></p> <p>Comment:</p> <p>The responsible DO respectively independent monitoring function might overlook the manufacturing process/step if the production facility is not located under one roof. There should be some sort of delegation process be in place with minimum requirements to be met shall be established.</p>
response	<p>Refer to Section 1</p>

1. About this NPA	p. 3
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comment	<p>138 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i></p> <p>The Rulemaking Group was -with the exception of ONE person- based on Authority representatives (ref. Public RULEMAKING GROUP COMPOSITION, dated 06.11.2012). This was not proportionate to the List of Stakeholders listed on page 1 of this NPA.</p>
response	<p>Refer to Section 1</p>
comment	<p>391 comment by: <i>Aviation Suppliers Association</i></p>



One element that is not addressed in the "next steps" discussion is the transition plan for moving from the current system to the system of tomorrow. There will be many parts that do not appear to have the "correct" documentation because they were documented under the current system. EASA should consider a transition plan for ensuring that parts produced before the change continue to be acceptable,

One piece of this plan might include permitting accredited distributors and certificate holders to certify that parts in their inventory were received before the implementation date of the new rules. Such certifications, once made, would serve as evidence that a part existed before the implementation date, and therefore should be subject to the old documentation rules (and not to the new documentation rules).

response **Refer to Section 1**

2. In summary – why and what

p. 4-6

comment 13 comment by: Yuksel Kenaroglu

Paragraph 2.3.: First sentence of second paragraph states that "This proposal would allow certain parts that are used during aircraft/component maintenance..."

As I stated in first comment, this requirement may apply to Design And Manufacturing companies, also! This point (scope) may be reviewed. Same rule or restriction should apply to all Part Users; Maintainers, Designers and Aircraft Manufacturers.

response **Refer to Section 1**

comment 18 comment by: Yuksel Kenaroglu

aaa

response **Refer to Section 1**

comment 19 comment by: Yuksel Kenaroglu

aaa

response **Refer to Section 1**

comment 20 comment by: Yuksel Kenaroglu

aaa

response **Refer to Section 1**

comment 21 comment by: Yuksel Kenaroglu



	aaa
response	Refer to Section 1
comment	<p>36 comment by: <i>Exec Flight</i></p> <p>I agree with the intention of these amendments but fear they will do little to alleviate the burden for existing aircraft. For existing aircraft that are no longer in production, there is no incentive for the Type Certificate Holder to retrospectively classify the many thousands of components that might exist in an aircraft. And the fall back procedure to seek EASA's approval is too much of a "sledge hammer to crack a nut". There needs to be a more pragmatic procedure to allow minor components to be classified as a low criticality level on an "as required" basis. Furthermore, the classification process should be capable of delegation to an appropriate body, such as an authorised maintenance organisation.</p>
response	Refer to Section 1
comment	<p>76 comment by: <i>René Meier, Europe Air Sports</i></p> <p>2.2 What we want to achieve - objectives p 5/32 3rd block</p> <p>The Agency writes: "EASA has preferred at this stage not to standardise the use of these terms nor to interpret them." We kindly invite the Agency to do just the opposite, to standardise the use of these terms, to interpret them by, where applicable, preparing waterproof definitions.</p> <p>Rationale We all know that the standard language, the "lingua franca" of the aeronautical circles, is "broken english". We are confronted almost daily with not so good translations, with slang expressions, with imprecise definitions, some of them provoking endless unnecessary discussions. This is particularly true for in many cases not translated Acceptable Means of Compliance (AMC) and Guidance Material GM).</p>
response	Refer to Section 1
comment	<p>77 comment by: <i>René Meier, Europe Air Sports</i></p> <p>2.2 What we want to achieve - objectives p 5/32 block 7</p> <p>The Agency writes: "In very few cases (e.g. for small aircraft... and there is a small fleet of aircraft registered in Europe...": We are interested to learn what aircraft are qualified as "small" and what fleet size will get the same attribute.</p>



	Rationale We do not oppose to the idea of EASA being in charge of establishing the Criticality Levels, we only want to know what we are agreeing to.
response	Refer to Section 1
comment	78 comment by: René Meier, Europe Air Sports 2.4 What are the expected benefits and drawbacks of the proposals p 6/32 Text block 3: "...as long as organisations act responsibly": Question: What about the individuals? And: What happens if....?
response	Refer to Section 1
comment	106 comment by: FFVV The intention with the proposed amendments is not to amend the existing approach concerning the repair of parts, i.e. only approved maintenance organisations (AMOs) would be allowed to repair parts, regardless of the production method of the parts. EASA is looking forward to receiving the stakeholders' views in this regard. <u>FFVV comment about maintenance and repair parts for ELA1/ELA2 (like glider)</u> As you indicate, it is very important to have parts throughout the life of the aircraft to be able to maintain it. One solution is to be able to remake a new part (for this the new orientation of the NPA 2017-19 is going in the right direction and will facilitate its new manufacture). Another solution is to recover parts from aircraft (for example an accident or damaged aircraft or which does not fly anymore) to mount them on another (<u>of the same type</u>) during its maintenance. As many people who work in the maintenance of aircraft ELA1 / ELA2 are not workshops under F (and therefore they can not establish EASA Form One), it is <u>absolutely necessary to authorize</u> by one means or another the fact that maintenance staff can disassembled part from an ELA1 / ELA2 aircraft to reassemble it to another ELA1 / ELA2 aircraft of <u>the same type without the need to go through a under F workshop</u> . For this it is necessary to create a spécial release certificate written and signed by the person who carried out the maintenance of the part (or the aircraft) (it is like an EASA Form One but it is not an EASA Form One because the person who realizes the maintenance of the part and the aircraft does not work in a workshop under part F (Part M under Part F). So you have to create a special release certificate for that. This point is very important because it will simplify the maintenance of old gliders for which it becomes more and more difficult to find parts for maintenance and it is easier to recover parts on a damage glider wich does not fly, to maintain them and put them back on a glider of the same type.



	if you want to talk to me about this idea, you can call me : (D. HYVERT 06 37 10 25 72)
response	Refer to Section 1
comment	139 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> Chapter 2.2 Objectives refers to chapter 4 .2 of this NPA which says this NPA 'provides the definition of 'parts and appliances''. This is currently subject of the new basic regulation and should be aligned.
response	Refer to Section 1
comment	140 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> Chapter 2.2 Objectives refers to chapter 4 .2 of this NPA which says this NPA 'foster international competitiveness of manufacturing companies.' What about the affect on TC Holder now? More burden and less competitiveness must be expected. Please ensure proper justification against the proposed US draft NPA which 'allows U.S. repair stations to perform a part 43 inspection and issue Form 8130-3 with a right-side signature for new Commercial Parts and COTS parts received without an Authorized Release Document (ARD). The repair station must establish (1) traceability to an approved design (rather than to a production approval holder) and (2) suitability for installation.'
response	Refer to Section 1
comment	141 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> Chapter 2.3 Overview says: 'classified by the DAH (for instance, type certificate holder) into different criticality levels (CLs) in accordance with certain safety criteria'. What are these 'certain' criteria expected for maintenance on aircraft with future changes, repairs, STCs, ETSOs and other config deviations introduced under the allowance of the State of Registry? How shall a TC Holder ensure control of the operational phase?
response	Refer to Section 1
comment	142 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> EASA offer to be 'particularly interested in the stakeholders' opinion on the four CLs this NPA proposes' should be replied by 'wrong approach'. Please imaging the effects, if the TC Holder would revise the CL for any reason! Are the existing parts immediately ineligible or vice versa? How would the world know about such change?
response	Refer to Section 1
comment	143 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>

response	<p>'Considering that for the safety of the aircraft the adequate functioning and the accomplishment of the expected life of the parts are crucial and that this relies on their sound production, the classification of the CLs for the parts must be an element of the product's type design.' is not a common position. The current system not requesting CLs is not less safe! Please avoid speculation.</p> <p>Refer to Section 1</p>
comment	<p>144 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i></p> <p>'...it is proposed that EASA may establish the CL for the parts.' Was there any reason why EASA shouldn't establishing the CLs for all EU registered aircraft? That approach would allow direct control of safety impacts at EASA level and in case of improper CL an EASA AD could be issued immediately. Justification for that approach is missing in this NPA.</p>
response	<p>Refer to Section 1</p>
comment	<p>145 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i></p> <p>'Under chapter 2.4 the benefits stated says 'proposal would be that parts classified into certain CLs can be more easily procured by organisations (or persons) performing maintenance'. That benefit must be justified against the need to create a new design data information called CL subject of future changes, subject of administration under LOI and compliance demonstration against CSs'. The proposed NPA is putting more load onto TC Holder to manage operational needs. Again, this is not in line with ICAO Annex 8 and the responsibility linked to the State of Registry as a sovereign state.</p>
response	<p>Refer to Section 1</p>
comment	<p>146 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i></p> <p>'In chapter 2.4 it is said 'The benefits of the proposal ... and can be installed on an aircraft without significantly affecting its airworthiness'. Does that mean, the proposal may have a negative (but not significant) on airworthiness, hence less 'conforms to approved design data' or less 'condition for safe operation'?</p>
response	<p>Refer to Section 1</p>
comment	<p>188 comment by: <i>Airlines for Europe (A4E)</i></p> <p>Paragraph/Headline: 2.3 Request for stakeholder review, page 5</p> <p>NPA Text subject to comments (abbreviated as applicable): The intention with the proposed amendments is not to amend the existing approach concerning the repair of parts, i.e. only approved maintenance organisations (AMOs) would be allowed to repair parts, regardless of the production method of the parts. EASA is looking forward to receiving the stakeholders' views in this regard.</p> <p>Comment:</p>

response	<p>A4E agrees with the EASA position that only approved maintenance organisations would be allowed to repair parts.</p> <p>Refer to Section 1</p>
comment	<p>212 comment by: <i>Laurent Lalaque</i></p> <p>For the parts of critically level other than CL I, the manufacturing precautions are decreased by this NPA, by removing the requirements associated to production organization approvals, without requiring in compensation any evidence of reliability of those parts. Obviously, the simple fact that a part is not specifically designed for aviation, does not imply this part is reliable. In addition, even a part that is mass produced, for the automotive industry for instance, could have been modified for its aeronautical use, or could be exposed to different environmental conditions, which would make its possible satisfactory in-service experience and its reliability data inappropriate for its aeronautical use.</p>
response	<p>Refer to Section 1</p>
comment	<p>213 comment by: <i>Laurent Lalaque</i></p> <p>It is requested to the DAH to modify the Type Design definition §21.A.91 by defining the part classification CLs, and to modify the Instruction for Continued Airworthiness to inform the maintenance organisations of the parts' CLs. These will have a significant impact for the DAH for the establishment of the Type Design documentations (Drawing and ICA), and significant burden and cost for the modification of the documentation of the existing products. If the objective of this proposed regulation amendment is to ease the General Aviation (ELA1 or ELA2) maintenance, as it is stated in the proposed Part-M [§M.A.502(a) and Part-145, the same limitations should be included in the Part-21 to avoid a burden on the others products, taking into consideration that the use of commercial parts on Part-25, CS-29 or CS-E products is very limited.</p>
response	<p>Refer to Section 1</p>
comment	<p>236 comment by: <i>Safran Landing Systems</i></p> <p>About the statement at paragraph 2.1: <i>“However, it is acknowledged that requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary”</i>.</p> <p>Safran Landing Systems consideration is that the “EASA Form 1 system” has proven its effectiveness across all past years. In particular it has permitted users (Airline Companies, MRO) to install parts and appliance by knowing their certification status without any question.</p> <p>The introduction of a parallel system, managed by a safety class allocation, will increase a certain level of ambiguousness. Companies will have to manage two systems to define whether the part & appliance is certified or not.</p> <p>It is also highlighted that there might be misunderstanding in the evidence for showing that a part & appliance belong to a class eligible or not for an EASA Form 1.</p>

This will lead to confusion at incoming areas of airlines and repair station and may increase the possibility for suspected unapproved parts embodiment on aircraft.

response **Refer to Section 1**

comment 237 comment by: Safran Landing Systems

A clarification would be sought for the statement at paragraph 2.4:

“The benefits of the proposal would be that parts classified into certain CLs can be more easily procured by organisations (or persons) performing maintenance, and can be installed on an aircraft *without significantly affecting its airworthiness*”

This NPA will practically introduce a parallel system to the EASA Form 1. Safran Landing Systems considers that this might affect airworthiness. This is more detailed in the comment 236 on the paragraph 2.1.

response **Refer to Section 1**

comment 238 comment by: Safran Landing Systems

Paragraph 2.4 states: “*After the expected smooth transition to the new system has taken place, no drawback is expected as long as organisations act responsibly.*”

Safran Landing Systems considers that this statement is not valid :

Either it will be required from the organizations to update all drawings (thousands per each organisations) which means a significant workload in the Design Companies (TCH and their Suppliers), to align their PLMs systems by adding the classifications. Or It means that TCH and their Suppliers will need to have two separate classification of the same parts & appliance. This will increase their internal cost and will increase the complexity.

Also in order to allow the end users to determine which kind of document is relevant for each incoming parts, all CMM ,IPC and IPL will have to be reviewed to include the new classification of the parts. This means revision of hundreds of documents by design offices.

response **Refer to Section 1**

comment 239 comment by: Safran Landing Systems

General comment on the paragraph 2.4. There are parts and equipments which are common to several programs and used for the same function with the same class analysis assessment. Whether the program will have been certified before or after the NPA may lead to different classification under two systems.



response [Refer to Section 1](#)

comment 240 comment by: Safran Landing Systems

About paragraph 2.3, general comment.

The Part 21 is proposed to be amended with a very detailed rule about the classification.

Safran Landing Systems ask whether this level of granularity would not be more appropriate into an AMC.

response [Refer to Section 1](#)

comment 244 comment by: Safran Landing Systems

About paragraph 2.1, general comment.

Safran Landing Systems has experienced that Aircraft parts often avoid customs fees provided that there is a demonstration that the part is to be installed on an aircraft. EASA form 1 has proven to be an "easy demonstration" and has worked several times.

Safran Landing Systems acknowledge that is a "side consideration" about the proposed NPA however we consider it should also be considered in the context of alleviating the overall cost as pointed out in paragraph 2.1

response [Refer to Section 1](#)

comment 248 comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 4/32, para. 2.2. What we want to achieve – objectives

2. PROPOSED TEXT / COMMENT :

The EASA states in this paragraph that "The specific objective of this proposal is to provide industry with flexibility for the acceptance of parts and appliances with different production background for installation in an aircraft during maintenance".

As a general comment, Airbus sees with the proposed amendments a risk that the different manufacturing backgrounds may generate more confusion than benefits resulting from the flexibility.

For example, a difficulty could be how to govern the acceptance of parts and appliances having a Criticality Level (evolving along time) that depends on the location/system on aircraft (i.e. that will have different production backgrounds) or on the Product?

3. RATIONALE / REASON :

Some components are fitted to aircraft at different locations and the Criticality Level may depend on the position on the aircraft and may evolve with design changes. The Criticality Level for a given component could also depend on the Product it is fitted to (e.g. between aircraft families of a same aircraft manufacturer, between aircraft manufacturers).



	The component acceptance process, under point 145.A.42 for example, could become more complex than currently.
response	Refer to Section 1
comment	<p>249 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 4/32, para. 2.3. How we want to achieve it – overview of the proposals</p> <p>2. PROPOSED TEXT / COMMENT : The EASA states in this paragraph that “The proposal would allow certain parts [...] to be manufactured by organisations not holding a POA, thus issuing the parts without an EASA Form 1”. This NPA proposes that the organisations manufacturing parts do not necessarily hold a POA, but other recognition of their manufacturing capability, based on industry standards, could be acceptable. One of the EASA Form 1 strengths is to bring standardisation in the presentation of essential data to AMOs during the component acceptance process (prevention of errors). But it is not the only one: An EASA Form 1 (for a new component) also carries the assurance that the new item it relates to is in conformity with the approved design data, as stated in the Part-21 Appendix I (referring to the general case). Without additional precautions taken, Airbus sees with the proposed amendments a relaxation that might lead to a possible decline of European aviation standards that in the end could (i) allow the proliferation of low quality components and (ii) contribute to reintroduce potential for mistakes in the acceptance of components (AMO). This raises the question how the regulator intends to manage industry standards (list of accepted standards seems to be in the AMC 21.A.309... is it exhaustive, acceptance/rejection of their evolutions, Agency participation in Standard Making Organisation activities, etc.). Will SMO need to demonstrate that their standards provide a minimum level of safety at least equivalent to Part-21 Subpart G?</p> <p>3. RATIONALE / REASON : As stated in this NPA, “the EASA Form 1 provides higher assurance of compliance with the approved design than any CofC”. “[C]hanging [regulations] in a way that would effectively allow the issue of a (CofC) [...] would reduce the controls on the manufacturing process of the part, with potential consequences in the airworthiness of the final product, i.e. potentially affecting the part’s reliability”. An EASA Form 1 for a new item certifies that this item (i) complies with a technical specification, and (ii) has been made by an organisation deploying a manufacturing process the competent authority has approved and can audit. There is a number of industry standards that may be used to deploy quality assurance. But it may not be necessarily sufficient to ensure the certification that the items produced comply with the relevant technical specification (as an example, ref. AMC M.A.501(c) for requirements on standard parts). Existing POA requirements set the standards. An acceptable industry standard should ensure that (i) each item, like any other sister one, has been manufactured in accordance with an approved and invariable process and (ii) there is a declaration</p>



that the item complies with the approved design data, and therefore is serviceable/airworthy.
The number of different forms/templates of CoC conforming to accepted industry standards (there are probably some other than those listed in the AMC 21.A.309 that are acceptable) may create in the end quite a huge burden on AMO for component acceptance.

response

Refer to Section 1

comment

250

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 5/32, para. 2.3. How we want to achieve it — overview of the proposals

2. PROPOSED TEXT / COMMENT :

EASA is looking forward to receiving the stakeholders' views in regard to the following statement: "The intention with the proposed amendments is not to amend the existing approach concerning the repair of parts, i.e. only approved maintenance organisations (AMOs) would be allowed to repair parts, regardless of the production method of the parts".

This statement gives the impression that the EASA intends to keep on with constant pressure on maintenance organisations while the administrative burden is alleviated/eliminated for organisations producing certain new spare parts and appliances. We see an inconsistency in the fact that a spare component manufactured by an organisation not holding a POA would require to be maintained only by organisations holding a MOA. Why would a maintenance organisation not holding a MOA be not enough?

It is believed that the introduction of more proportionate and efficient requirements in the airworthiness field should be considered from an end-to-end perspective. In particular, we believe that the introduction/amendment of requirements for new spare parts and appliances should be commensurate but consistent across this field.

3. RATIONALE / REASON :

We believe that consistency should be ensured across the Initial and the Continuing Airworthiness domains, including after this rulemaking task.

This consistency is emphasised in point M.A.101: the Part-M Section A establishes the measures (including maintenance) to be taken to ensure that airworthiness is maintained. In other words, persons and organisations involved in the Initial Airworthiness (sub-) process establish the standard and those involved in the Continuing Airworthiness (sub-) process maintain this standard. But the latter are not required implementing improved standards (unless mandatory continued airworthiness instructions are published).

Should there be an administrative alleviation granted for the production of a spare part, the same alleviation should be granted for its maintenance. Should the spare part fail to meet its design standards, the consequences on airworthiness remain the same whether the causes are linked to manufacture or to maintenance.

Without further justifications, the EASA intention would introduce a contradiction with point M.A.101 and an unequal treatment between organisations dealing with a same aircraft component. Therefore we believe that the consistency is not ensured with the proposed amendments.



response

[Refer to Section 1](#)

comment

251

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 5/32, para. 2.3. How we want to achieve it — overview of the proposals

2. PROPOSED TEXT / COMMENT :

The EASA indicates in this paragraph that it is particularly interested in the stakeholders' opinion on the four Criticality Levels (CL) this NPA proposes and on how these levels should be defined.

The classification of parts and appliances as an element of the product's type design is perceived positively from a continuing airworthiness standpoint. It will be, once made available to affected parties, the basis for CAMO and AMO to develop procedures and maintenance tasks proportionate to the severity of parts/appliances failure (depending, for example, on the criticality of functions performed by parts and appliances). The classification will be beneficial if the concept is introduced in the continuing airworthiness domain.

Another positive aspect is the introduction of a privilege in the point 21.A.263 'Privileges' for the approval of the CL assignment or amendments thereto.

However, Airbus' opinion is that this NPA may create an inconsistency with CS-25 and potentially with other CS. One could ask why an EASA Form 1 is required for structural parts the failure of which could contribute to a hazardous failure of the aeroplane, when CS 25.571 requirements do not consider failure effect severities other than catastrophic.

Although Airbus supports the concept of criticality levels because it provides equity and progressiveness of the rule, it is believed that there is room for improvement in the manner it is introduced. The matter is a "right fit candidate" to introduce a performance-based regulation. Most of the text should be proposed as "soft laws", i.e. CS/AMC/GM rather than requirements in the Implementing Rules.

Further, Airbus believes that this categorisation of parts and appliances should not be addressed in isolation, but should be assessed taking a holistic approach of the 'critical' terminology (functions, failure conditions, components, maintenance tasks, etc...). Beyond the scope of this NPA, this classification could be used to address some concerns related to matters such as PMA acceptance, critical components (AMC M.A.504(d)2 para. 4.), critical maintenance tasks (145.A.48), component maintenance records (M.A.305), parts involved in aircraft incidents/accidents (AMC2 145.A.50(d) para. 2.9).

3. RATIONALE / REASON :

It is worth noting that the certification specifications already include some criteria to categorise aircraft items depending on the severity of their failure effects/the failure condition, e.g. for large aeroplanes:

- CS 25.571(a)(1) requires an evaluation of the aeroplane structure to show that catastrophic failure will be avoided throughout the operational life of the aeroplane. As part of this evaluation, it is required to identify the principal structural elements and detail design points, the failure of which could contribute to a catastrophic failure of the aeroplane.



· CS 25.1309(b) requires that the aeroplane systems and associated components, considered separately and in relation to other systems must be designed so that any catastrophic failure condition is extremely improbable and does not result from a single failure. It also requires that any hazardous failure condition is extremely remote, and that any major failure condition is remote.

The AMC 25.1309 provides a classification according to the severity of effects. A parallel with the Criticality Levels of this NPA can be made:

- CL I corresponds to the classification ‘Hazardous’ in CS-25,
- CL II corresponds to the classification ‘Major’ in CS-25,
- CL III corresponds to the classification ‘Minor’ in CS-25,
- CL IV corresponds to the classification ‘No safety effect’ in CS-25.

Besides, this NPA makes use of the terminology ‘critical’ and consistency is not ensured. It may result in confusion, misunderstanding, and in the end, mistakes. A holistic approach of the ‘critical’ terminology should be adopted.

Consideration should also be given to the definition of ‘critical component’ given in the EASA-FAA TIP.

response **Refer to Section 1**

comment

252

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 5/32, para. 2.3. How we want to achieve it — overview of the proposals

2. PROPOSED TEXT / COMMENT :

The EASA states in this paragraph “It is expected that by easing the manufacturing standards for certain parts (i.e. by not requesting an EASA Form 1 for all parts) used during maintenance, the cost of the related parts would decrease and this would in turn lead up to reduced maintenance costs for the aircraft owners”.

3. RATIONALE / REASON :

We have no evidence of such reduced maintenance costs for aircraft owners.

The costs associated with the process to obtain and hold any organisation approval (incl. a production approval) are substantial. But it is believed that the issuance of an EASA Form 1, taken in isolation, is not prohibitively expensive.

response **Refer to Section 1**

comment

253

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 5/32, para. 2.3. How we want to achieve it — overview of the proposals

2. PROPOSED TEXT / COMMENT :

The EASA states in this paragraph “Mandating the issue of an EASA Form 1 for all parts used during maintenance is considered to be unnecessary and onerous”.



response	<p>3. RATIONALE / REASON : Airbus believes that it is essential to ensure equal treatment between production and maintenance organisations dealing with a same aircraft component.</p>
	<p>Refer to Section 1</p>
comment	<p>254 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 6/32, para. 2.4. What are the expected benefits and drawbacks of the proposals</p> <p>2. PROPOSED TEXT / COMMENT : The EASA states in this paragraph that “[m]ore responsibility would be given [...] to certain manufacturing organisations that would not require oversight by CAs but only compliance with industry standards, which are typically recognised worldwide”. It goes on with “After the expected smooth transition to the new system has taken place, no drawback is expected as long as organisations act responsibly”. In this case, what would be the EASA lever on an organisation that operates under a quality system compliant with an industry standard (as no Part-21 approval can be suspended or revoked) ?</p> <p>3. RATIONALE / REASON : As stated in this NPA, “[C]hanging [regulations] in a way that would effectively allow the issue of a (CofC) [...] would reduce the controls on the manufacturing process of the part, with potential consequences in the airworthiness of the final product, i.e. potentially affecting the part’s reliability”. The principal objective of Regulation (EC) No 216/2008 is to establish and maintain a <u>high</u> uniform level of civil aviation safety in Europe. However in this NPA, we see a reduction of the controls on the manufacturing process of parts and appliances and a lack of effective compensations for organisations acting not responsibly that could cause damage to the civil aviation safety in Europe.</p>
response	<p>Refer to Section 1</p>
comment	<p>294 comment by: Safran Nacelles</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p><i>In practice, the parts would be classified by the DAH (for instance, type certificate holder) into different criticality levels (CLs) in accordance with certain safety criteria in order to be eligible for being manufactured outside the POA (or Part 21, Subpart F) framework.</i></p> <p>The four proposed criteria CL1 to CL4 are not fully consistent with CS25.1309 which considers 5 criteria (Catastrophic /Hazardous /Major /Minor /No safety Effect).</p> </div> <p>Consistency between AMC 25.1309 and CLs is aimed to avoid risk of misinterpretation.</p>
response	<p>Refer to Section 1</p>



comment	<p>295</p> <p>comment by: Safran Nacelles</p> <div style="border: 1px solid black; padding: 5px;"> <p><i>In practice, the parts would be classified by the DAH (for instance, type certificate holder) into different criticality levels (CLs) in accordance with certain safety criteria in order to be eligible for being manufactured outside the POA (or Part 21, Subpart F) framework.</i></p> <p>Note that AC 43.18 is introducing 3 categories with definitions that are not fully consistent with CLs.</p> </div> <p>Harmonisation between CLs and AC 43.18 categories could help to minimise the risk of misinterpretation</p>
response	<p>Refer to Section 1</p>
comment	<p>296</p> <p>comment by: Safran Nacelles</p> <div style="border: 1px solid black; padding: 5px;"> <p><i>In practice, the parts would be classified by the DAH (for instance, type certificate holder) into different criticality levels (CLs) in accordance with certain safety criteria in order to be eligible for being manufactured outside the POA (or Part 21, Subpart F) framework.</i></p> <p>This NPA is proposing the criticality levels for determining the release documents required to release a part to service.</p> <p>Note that AC 43.18 is introducing 3 categories for the purpose of design and manufacturing conformity validation needs.</p> <p>It should be noted that proposed NPA only address manufacturing conformity and not design requirements. This creates inconsistencies between the design and manufacturing criteria.</p> </div> <p>In line with this AC, it could be interesting to make consistent the criticality level definition for design & manufacturing conformity requirements.</p>
response	<p>Refer to Section 1</p>
comment	<p>297</p> <p>comment by: Safran Nacelles</p> <div style="border: 1px solid black; padding: 5px;"> <p><i>Mandating the issue of an EASA Form 1 for all parts used during maintenance is considered to be unnecessary and onerous. The proposed rules establish a system on which the DAHs, based on certain criteria defined in the rules, can assign different manufacturing standards for different parts. It is expected that by easing the manufacturing standards for certain parts (i.e. by not requesting an EASA Form 1 for all parts) used during maintenance, the cost of the related parts would decrease and this would in turn lead up to reduced maintenance costs for the aircraft owners.</i></p> </div>

response	<p>We understand and support the initiative to ease the manufacturing and reduce the cost of the maintenance; however it should not be to the detriment of the safety.</p> <p>Refer to Section 1</p>
comment	<p>298 comment by: <i>Safran Nacelles</i></p> <p><i>The benefits of the proposal would be that parts classified into certain CLs can be more easily procured by organisations (or persons) performing maintenance, and can be installed on an aircraft without significantly affecting its airworthiness.</i></p> <p>In the current definition only CL I can be understood as significantly affecting airworthiness as the proposal is not to maintain EASA Form 1 for other CLs. According to Part 21.A.3, parts from other categories than CL I could generate unsafe conditions, in particular if the event is repetitive, leads to loss of parts or affects the fire safety.</p> <p>Safran Nacelles recommends making consistency between CL categories requiring an EASA form1 and the definition of a potential unsafe condition of Part 21 A.3.</p>
response	<p>Refer to Section 1</p>
comment	<p>301 comment by: <i>Airbus Helicopters</i></p> <p>Page 5 2.3</p> <p>NPA should include also MRO activities for CL IV parts.</p> <p>Actually no possibility to supply repaired parts, like mission equipment to our customers.</p> <p>For parts and appliances, which are defined under “Criticality Level IV”, can follow the same approach as new parts and appliances, if the repair is performed under the control of or by the OEM, who has delivered the part first time. Any installation and exchange of parts and appliances at H/C level has to be performed within the AMOs.</p>
response	<p>Refer to Section 1</p>
comment	<p>303 comment by: <i>SAFRAN TRANSMISSION SYSTEMS</i></p> <p>Chapter 2.1 Why we need to change the rules — issue/rationale</p> <p>To guarantee that new parts⁸ for use during aircraft (or component) maintenance conforms to the intended design (including related manufacturing requirements), current airworthiness rules stipulate that these parts need to be produced in accordance with the manufacturing provisions of Part 21 Subpart F (‘Production</p>

without production organisation approval') or Subpart G ('Production organisation approval'), permitting the issuance of an EASA Form 1 for the produced part9. However, it is acknowledged that requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary.

Comment 1: "intended" is to be replaced by Approved Design (Type Design). "Intended" is not an airworthy condition and may not / cannot sustain the Certification requirements.

response **Refer to Section 1**

comment 304 comment by: SAFRAN TRANSMISSION SYSTEMS

Chapter 2.1 Why we need to change the rules — issue/rationale

To guarantee that new parts8 for use during aircraft (or component) maintenance conforms to the **intended** design (including related manufacturing requirements), current airworthiness rules stipulate that these parts need to be produced in accordance with the manufacturing provisions of Part 21 Subpart F ('Production without production organisation approval') or Subpart G ('Production organisation approval'), permitting the issuance of an EASA Form 1 for the produced part9. However, it is acknowledged that requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary.

Comment 2: alleviations already exist for some General Aviation (ELA1, ELA2 and gliders) are they compatible with safety targets for CAT airplanes? The actual CAT safety/reliability results will lead to an events increase due to traffic growth. Introducing parts with intended design during maintenance, may lead to unsafe conditions.

response **Refer to Section 1**

comment 305 comment by: SAFRAN TRANSMISSION SYSTEMS

Chapter 2.3. How we want to achieve it — overview of the proposals

The purpose of the main concepts proposed in this NPA is to achieve the objectives identified in the terms of reference (ToR)11 of the aforementioned RMTs and which are also listed in Section 4.2. For a detailed explanation of each of the proposed amendments, refer to Chapter 3. of this NPA.

The proposal would allow **certain parts** that are used during aircraft/component maintenance to be manufactured by organisations not holding a POA, thus issuing the parts without an EASA Form 1. One consequence of this proposal is that some manufacturing organisations located outside the EU that currently need a POA in order to manufacture spare parts for European aircraft will no longer need European manufacturing certificates issued in accordance with Part 21. This may provide flexibility for obtaining spare parts for some legacy aircraft.



	<u>Comment3</u> : what includes “certain parts”? Please define.
response	Refer to Section 1
comment	<p>306 comment by: SAFRAN TRANSMISSION SYSTEMS</p> <p>Chapter 2.3: In practice, the parts would be classified by the DAH (for instance, type certificate holder) into different criticality levels (CLs) in accordance with certain safety criteria in order to be eligible for being manufactured outside the POA (or Part 21, Subpart F) framework.</p> <p><u>Comment4</u>: this statement introduce a change in DOA responsibility, a change in DOA capacity to conduct a correct Continuing Airworthiness process and to provide investigation and occurrence reporting for parts that have been manufacture outside the POA. This need to be introduced in 21.A.3A Failures, malfunctions and defects. This activity is to be transferred to the Aircraft owner, as the parts provider has no responsibility and no obligations to do it.</p>
response	Refer to Section 1
comment	<p>307 comment by: SAFRAN TRANSMISSION SYSTEMS</p> <p>Chapter 2.3: Considering that for the safety of the aircraft the adequate functioning and the accomplishment of the expected life of the parts are crucial and that this relies on their sound production, the classification of the CLs for the parts must be an element of the product’s type design. This proposal amends the rule in this regard, so that when the design requires approval, i.e. for any design change except in the case of 21.A.90B ‘Standard changes’ or 21.A.431B ‘Standard repairs’, establishing a new CL for the parts of an already approved design will require to follow the design change approval process.</p> <p><u>Comment5</u>: the safety of the aircraft is based on Design assessments and analysis to Certification Basis (certification, changes and deviations to Type Design). Who will perform them for parts that are not under POA as the manufacturer will not have access to the Type Design (CS-E, CS-25, + others)</p>
response	Refer to Section 1
comment	<p>308 comment by: SAFRAN TRANSMISSION SYSTEMS</p> <p>Chapter 2.3: The draft amendment also proposes that the DAH has to make available to affected parties the classification of the parts (CLs in this NPA) so that maintenance organisations can have evidence that the part they are installing on a product has been manufactured as per the required (or higher) standards.</p> <p><u>Comment6</u>: will this information part of ICAs?</p>
response	Refer to Section 1

comment	309	comment by: SAFRAN TRANSMISSION SYSTEMS
	<p>Chapter 2.3: The draft amendment also proposes that the DAH has to make available to affected parties the classification of the parts (CLs in this NPA) so that maintenance organisations can have evidence that the part they are installing on a product has been manufactured as per the required (or higher) standards.</p> <p><u>Comment7</u>: How this this activity will be funded?</p>	
response	Refer to Section 1	
comment	310	comment by: SAFRAN TRANSMISSION SYSTEMS
	<p>Chapter 2.3: The draft amendment also proposes that the DAH has to make available to affected parties the classification of the parts (CLs in this NPA) so that maintenance organisations can have evidence that the part they are installing on a product has been manufactured as per the required (or higher) standards.</p> <p><u>Comment8</u>: This is an increase on charges to the industry not included in the actual economic model, without any benefit for the safety of the product for the end customer.</p>	
response	Refer to Section 1	
comment	311	comment by: SAFRAN TRANSMISSION SYSTEMS
	<p>Chapter 2.3: In very few cases (e.g. for small aircraft for which the DAH's site and the production of new parts are located outside Europe and there is a small fleet of aircraft registered in Europe), imposing the EU system for the manufacturing of the spare parts may not be reasonable. For these cases, it is proposed that EASA may establish the CL for the parts, providing certain flexibility for special cases.</p> <p><u>Comment9</u>: this statement could be valid for General Aviation (ELA1 & ELA2), not for CAT. Please clarify applicability.</p>	
response	Refer to Section 1	
comment	312	comment by: SAFRAN TRANSMISSION SYSTEMS
	<p>Chapter 2.3: Commission Regulation (EU) No 965/201212 (the 'Air Operations Regulation'), in point CAT.IDE.A.10013 'Instruments and equipment — general' of Annex IV (Part-CAT), alleviates the need for an airworthiness certificate for certain equipment on board an aircraft. EASA understands that this equipment falls under the definition of 'parts and appliances mounted on the aircraft'¹⁴ provided in the Basic Regulation and therefore the proposed amendments of this NPA do not clash with the Air Operations Regulation.</p> <p>¹⁴ Regulation (EC) No 1108/2009 of 21 October 2009 amending the Basic Regulation defines 'parts and appliances' as <i>any instrument, equipment, mechanism, part, apparatus, appurtenance, software or accessory, including communications equipment, that is used or intended to be used in operating or controlling an aircraft in flight; it shall include parts of an airframe, engine or propeller, or equipment used</i></p>	

to manoeuvre the aircraft from the ground. See also Section 4.1. for a more detailed discussion (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:309:0051:0070:EN:PDF>)

Comment10: parts of an airframe, engine or propeller are to be excluded. This statement, if limited to equipment used to manoeuvre the aircraft from the ground is to be developed in a specific chapter.

response **Refer to Section 1**

comment 313 comment by: SAFRAN TRANSMISSION SYSTEMS

Chapter 2.4: The benefits of the proposal would be that parts classified into certain CLs can be more easily procured by organisations (or persons) performing maintenance, and can be installed on an aircraft without significantly affecting its airworthiness.

Comment11: could you clarify in figures what is “without significantly affecting airworthiness”?

response **Refer to Section 1**

comment 314 comment by: SAFRAN TRANSMISSION SYSTEMS

Chapter 2.4: The benefits of the proposal would be that parts classified into certain CLs can be more easily procured by organisations (or persons) performing maintenance, and can be installed on an aircraft without significantly affecting its airworthiness.

Comment12: do you plan to revisit the EPAS taking into consideration this “without significantly affecting airworthiness”?

response **Refer to Section 1**

comment 315 comment by: SAFRAN TRANSMISSION SYSTEMS

Chapter 2.4: More responsibility would be given to design organisations that would be able to propose the CL and to certain manufacturing organisations that would not require oversight by CAs but only compliance with industry standards, which are typically recognised worldwide. Therefore, this would facilitate collaboration with manufacturing organisations located in geographical regions subject to different rules.

Comment13: no responsibility will be given to manufacturing organisations, as no regulation is applicable. Responsibility belongs to EASA or aircraft owner when defined.

response **Refer to Section 1**

comment 316 comment by: SAFRAN TRANSMISSION SYSTEMS



Chapter 2.4: Therefore, this would facilitate collaboration with manufacturing organisations located in geographical regions subject to different rules. After the expected smooth transition to the new system has taken place, no drawback is expected as long as organisations act responsibly.

Comment14: some EUs industries did recently provide a good evidence of their understanding of “organisations acting responsibly”. How do you plan to control this worldwide?

The answer from the Agencies, Aircraft industry and CAT is Regulation for Safety.

response **Refer to Section 1**

comment 329 comment by: *Jeff Conner*

The first paragraph on page 5 states "The intention with the proposed amendments is not to amend the existing approach concerning the repair of parts, i.e. only approved maintenance organisations (AMOs) would be allowed to repair parts, regardless of the production method of the parts. EASA is looking forward to receiving the stakeholders' views in this regard."

GE Aviation agrees that the proposed NPA should not change the requirement that repair of parts can only be performed by approved maintenance organizations.

response **Refer to Section 1**

comment 330 comment by: *Jeff Conner*

The second paragraph on page 5 states "EASA is also particularly interested in the stakeholders' opinion on the four CLs this NPA proposes and on how these levels should be defined."

GE Aviation does not agree with the proposed four CLs in this NPA. These CLs do not align with categories defined in CS 25.1309 ... Catastrophic / Hazardous / Major / Minor / No Safety Effect).

response **Refer to Section 1**

comment 332 comment by: *Jeff Conner*

"The draft amendment also proposes that the DAH has to make available to affected parties the classification of the parts (CLs in this NPA) so that maintenance organisations can have evidence that the part they are installing on a product has been manufactured as per the required (or higher) standards."

GE Aviation Comment:

The "make available" language used in the above sentence implies that Criticality Levels assigned by the DAH become part of the Instructions for Continued Airworthiness (ICA). However, the Criticality Levels defined in this NPA do not align with Safety Analysis categories defined in CS 25.1309 (Catastrophic / Hazardous / Major / Minor / No Safety Effect). Additionally, for turbine engines CS-E 25 requires that ICA address Engine Critical Parts - a nomenclature not included in the CL levels



response	<p>proposed in this NPA. Failure to use common terminology within EASA regulations will create confusion.</p>
	<p>Refer to Section 1</p>
comment	<p>333 comment by: <i>Leonardo Helicopters</i></p> <p>At the end of page 5 the requirement "the DAH has to make available to affected parties the classification..." should be replaced with "the PO has to make available...", as the parts are provided by a PO to a MO with an EASA Form 1 or a Certificate of Conformity. Also it should be verified whether in the form Certificate of Conformity there is a specific box for the classification.</p>
response	<p>Refer to Section 1</p>
comment	<p>347 comment by: <i>European Sailplane Manufacturers</i></p> <p>The proposed naming / numbering scheme of the criticality levels is confusing.</p> <p>According to the NPA, a CL I is used for the most critical category, i.e. such a part must not fail. Nevertheless in the text it is often said, that "lowering the criticality level" is equivalent to reducing the number used (e.g. from CL IV to CL I / II / III). This wording only makes sense when one is considering the roman number behind the letters "CL" but normally everyone would interpret a "lower criticality" with "less critical part" and accordingly "less strict rules required".</p> <p>We therefore propose either to inverse the numbering scheme, i.e. that CL IV is the highest CL level (= the most critical parts = a Form 1 is required) and accordingly CL I then the lowest, least critical, most liberal conformity documentation.</p> <p>Another possibility would be to go away from numbers and insted use letters - here e.g. CL A could be the most critical category (= Form 1 required) and CL D would then be least critical (= no Form 1 needed).</p> <p>(Nevertheless in our other comments we use the CL levels as used in the NPA to avoid confusion.)</p>
response	<p>Refer to Section 1</p>
comment	<p>354 comment by: <i>Rolls-Royce plc POA</i></p> <p>We think a simple risk assessment of the propsed approach identifies a significant risk of reduced controls and therefore counterfeit parts instances being increased. Even if the intention is well meant the wording is such that the level of ambiguity introduced to the status of parts would increase the level of difficulty in filtering bogus parts at receipt inspection. The barrier to entry would be greatly reduced and the temptation for procuring cheap parts in stressful situations increased (human factors). The practicalities for decsion making at receipt inspection need much greater consideration- the sheerr variety of COCs makingbthe task much more difficult, would mandatory statements be required on CoCs confirming links with DOA (Type Cert Holder) and POA ?</p>

response

Refer to Section 1

comment

372 ❖

comment by: *HEICO Aerospace*

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”

As appropriate, replace “Critical” with “Safety Sensitive.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response

Refer to Section 1

comment

389

comment by: *Aviation Suppliers Association*

Section 2.1 explains that "requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary." The problem statement is focussed on the documentation; but section 2.2 goes into production approval basis. Production approval basis is a separate issue, with separate drivers and separate solutions. We recommend that the second paragraph of section 2.2 be amended to read "The specific objective of this proposal is to provide industry with flexibility for the identification and acceptance of safe parts and appliances for installation in an aircraft during maintenance." We also recommend that throughout the NPA, the changes in production approval basis be dropped in favor of a more robust approach to such changes.

response

Refer to Section 1

comment

404

comment by: *DGAC France*

The NPA has been elaborated only for the maintenance domain. If there is some justifications on this issue for the maintenance, this NPA should also be applicable for the production domain. This NPA should also refer to the customer/ CAMO which are



	<p><i>also involved regarding this issue by providing some parts to their maintenance organisations, by monitoring the airworthiness of their aircraft/products.</i></p>
response	<p>Refer to Section 1</p>
comment	<p>416 comment by: <i>Federal Aviation Administration</i></p> <p>Paragraph 4.1.2 misrepresents the U.S. system for the manufacture and control of aircraft parts. It states in part “allow that parts are released with certificates from an organization that is not under the FAA supervision for manufacturing.”</p> <p>Standard parts and commercial parts may be manufactured without FAA oversight, and the company may ship those parts with a certificate of conformance. They are not eligible for an FAA Form 8130-3.</p> <p>14 CFR 21.9 contains methods by which parts may be produced for installation, including maintenance, surplus military parts and owner produced parts. It also contains a provision that parts such as those referenced in paragraph 4.1.2, must be produced under an FAA production approval.</p> <p>The FAA system does not require that parts used in maintenance be accompanied by an FAA 8130-3. Parts may be accepted on the basis of marking by the production approval holder, and may be supplemented by a certificate of conformance.</p> <p>14CFR 21.146(d) and (e) contain marking requirements for production certificate holders, 21.316(d) and (e) contain marking requirements for replace and modification parts (PMA), and 21.616(d) and (e) contain marking requirements for TSO parts.</p> <p>The issuance of an FAA Form 8130-3 for these properly marked parts has been determined to add no value and have no contribution to safety. This determination has been validated by decades of manufacturing and maintenance activity.</p> <p>Parts that have left the production approval holders system, such as those found in distributors, or maintenance inventories, may be issued an FAA 8130-3 by an authorized FAA Designated Airworthiness Representative (DAR). To issue the form, they must determine the part is airworthy and be able to trace it back to an approved design, through marking and certificates of conformance.</p> <p>A person who issues an FAA Form 8130-3 for a part that was not produced by, or accepted into the quality system of a production approval holder (as in the case of supplier parts), would be subject to violation under 14 CFR 21.2</p>
response	<p>Refer to Section 1</p>
comment	<p>440 comment by: <i>Safran Cabin Germany GmbH DOA 21J.067</i></p>

This proposed NPA is considered to not meet the intention of Article 5 of the Basic Regulations, where Item 2.(b) stipulates that the measures referred to in paragraph 5 may lay down a requirement for certification in respect of parts and appliances. The certificates for parts and appliances shall be issued when the applicant has shown that the parts and appliances comply with the detailed airworthiness specifications established to ensure compliance with the essential requirements for airworthiness laid down in Annex I.

Thus the issue within this NPA is with the criticality levels (CLs) assigned to parts, which should be limited to two CLs, i.e. with and without showing of compliance with detailed airworthiness specifications, to meet Article 5 of the Basic Regulations.

response

Refer to Section 1

comment

446

comment by: *THALES***THALES AVS general position**

THALES AVS understands the need for more flexibility for the acceptance of parts and appliances for installation in an aircraft but the game's rules must be the same for all the players.

The objective of providing more flexibility only for maintenance will introduce an unbalanced situation for the OEM in charge of part production for linefit which is out of the scope of this amendment proposal. There is a major risk to generate a dual shipping system with on one side the OEMs like THALES having the constraint of POA obligations to deliver Part with form1 for linefit and on parallel new manufacturers with light production organization approvals able to manufacture at lower cost for the maintenance.

The same unbalanced situation will appear for the repairs activities. Today, for repairs, an AMO purchases parts sub-component to the OEM according to the Illustrated Part List (IPL) and the OEM delivers the sub-component with a Form1. Tomorrow, with the proposed change and according to the Part Criticality Level, the AMO may purchase the sub-component from other manufacturers with lower production approvals and then lower costs.

Consequently, THALES AVS does not support the current NPA as it impacts a lot of process and organization matters. As the NPA objective is to improve General aviation sector in bringing flexibility for some specific parts manufactured by organization not dedicated to the aviation industry and not having POA, THALES AVS recommends to rework the proposal to simplify it and to limit the changes to these particular cases rather than introducing changes in Part 21, Part M and Part 145 having broad impacts on all organizations and not only for general aviation.

response

Refer to Section 1

comment

452

comment by: *Safran Aircraft Engines*

	<p>Section 2, § 2.3 , Page 4/32</p> <p><i>The proposal would allow certain parts that are used during aircraft/component maintenance to be manufactured by organisations not holding a POA, thus issuing the parts without an EASA Form 1. One consequence of this proposal is that some manufacturing organisations located outside the EU that currently need a POA in order to manufacture spare parts for European aircraft will no longer need European manufacturing certificates issued in accordance with Part 21. This may provide flexibility for obtaining spare parts for some legacy aircraft.</i></p> <p>This would create unfair competitiveness situation between non-EU companies that would not need an EASA POA to produce parts, while its EU competitors are required to comply with the POA requirement.</p>
response	<p>Refer to Section 1</p>
comment	<p>453 comment by: <i>Safran Aircraft Engines</i></p> <p>Section 2, § 2.3, page 5/32</p> <p>The intention with the proposed amendments is not to amend the existing approach concerning the repair of parts, i.e. only approved maintenance organisations (AMOs) would be allowed to repair parts, regardless of the production method of the parts. EASA is looking forward to receiving the stakeholders' views in this regard. We agree that the proposed NPA must not affect the current functions and responsibilities of the maintenance organisation.</p>
response	<p>Refer to Section 1</p>
comment	<p>456 comment by: <i>Safran Aircraft Engines</i></p> <p>Section 2, § 2.3, page 5/32</p> <p><i>Considering that for ... , <u>the classification of the CLs for the parts must be an element of the product's type design</u>. This proposal ... approval process.</i></p> <p><i>The draft amendment also proposes that <u>the DAH has to make available to affected parties the classification of the parts (CLs in this NPA) so that ... standards.</u></i></p> <p>It is requested to the DAH to modify the Type Design definition §21.A.91 by defining the part's classification CLs, and to modify the Instruction for Continued Airworthiness to inform the maintenance organisations of the parts' CLs. These will have a significant impact for the DAH for the establishment of the Type Design documentations (Drawing and ICA), and significant burden and cost for the modification of the documentation of the existing products.</p> <p>The objective of this proposed regulation amendment is to ease the General Aviation (ELA1 or ELA2) maintenance, which is clearly stated in the proposed paragraphs for Part-M [§M.A.502(a) and Part-145. The same limitations should be included in the Part-21 to avoid burden on the others products, taking into consideration that the use of commercial parts on Part-25, CS-29 or CS-E products is very limited.</p>
response	<p>Refer to Section 1</p>

comment	457	comment by: <i>Safran Aircraft Engines</i>
	<p>Section 2, §2.4, page 6/32</p> <p><i>The benefits of the proposal would be that parts classified into certain CLs can be more easily procured by organisations (or persons) performing maintenance, and can be installed on an aircraft without significantly affecting its airworthiness.</i></p> <p>What is the definition of “without significantly affecting its airworthiness”?</p> <p>Proposed text: To add a definition in the § Part-21.A.308 or 309</p>	
response	Refer to Section 1	

comment	464	comment by: <i>Swiss Aviation Maintenance Association SAMA</i>
	<p>Under 2.3</p> <p>"The intention with the proposed amendments is not to amend the existing approach concerning the repair of parts, i.e. only approved maintenance organisations (AMOs) would be allowed to repair parts,..."</p> <p>Is it foreseen, that only an AMO will repair all CL II through CL IV parts and thereafter releasing it with an EASA Form 1 accordingly or with a different Form?</p> <p>Proposal: EASA to review the issue and give clarification and/or examples (e.g. FAA Order 8130.21H)</p>	
response	Refer to Section 1	

3.1 Draft EASA opinion – Proposed amendments to Part 21

p. 7

comment	390	comment by: <i>Aviation Suppliers Association</i>
	<p>Criticality levels will dictate the necessary documentation that must follow a part in order for the part to remain installable when it arrives at a maintenance facility. Knowing the criticality level of a part will be vital to transactions in that part. Many persons who are not certificate holders engage in aircraft parts transactions; they will therefore need to know those criticality parts in order to support aviation safety and maintain proper documentation paradigms. This includes parties like aircraft parts distributors, freight forwarders, and leasing companies. Without access to criticality level data, these parties - who are currently important participants in the distribution chain for aircraft parts - will not know what is the proper documentation for a part.</p> <p>It is important to include a mechanism for all such interested parties to obtain that information. The list of interested parties for such a list is more expansive than the list of maintenance providers and operators. We suggest preparing regulatory text to ensure availability of this information. It is important that these lists be made available in an even-handed way, which helps to protect a level playing field, and that their circulation be protected from being used for competitive gain which could undermine the stated purposes of this NPA.</p>	



We recommend amending EASA 21.A.61 by adding a subsection 'c' that reads as follows:

"(c) If an applicant or design holder chooses to assign criticality levels, as defined in point 21.A.308, for new parts and appliances to be installed during maintenance, then the applicant or design holder shall prepare a list of those parts with the assigned criticality levels, and shall provide that list to any interested person upon request. Such a list may be made available on a commonly accessible medium, such as a website, but access to such lists may not be restricted by any additional consideration."

response **Refer to Section 1**

comment **403** comment by: *DGAC France*

DGAC France suggests considering CL's assignment and reassessment as a privilege granted to DOAs as part of existing 21.A.263(c)(3) privilege for the issuance of approved information or instructions. By doing so, CL's list will be considered as DOA approved information/instructions that are part of the product Type Design/Certificate. Only DOA with appropriate scope of approval will be allowed to assign or amend CLs. With this approach, there is no longer a need to classify CLs assignment or reassessment as major or minor change to TC/STC as this task is covered by a DOA privilege that can be used for any design change developed by the DOA regardless of the change classification. If a change consists exclusively in assigning or reassessing CL's for an existing design, the change shall then be considered as "minor-minor" meaning that no Certification Specifications are affected.

In case of major change, EASA will remain free to ask for the CL assignment list developed by the DOA for review. If this option is retained, the fact to provide the CL assignment list (where applicable) as part of the certification programme might be added in current AMC to 21.A.20(b).

response **Refer to Section 1**

comment **439** comment by: *ARSA*

ARSA suggests the following changes to 21.A.130 and 21.A.165 denoted in red text.

21.A.130 Statement of conformity

(a) Each manufacturer of a product, part or appliance manufactured under this Subpart shall raise a statement of conformity, an EASA Form 52 (see Appendix VIII), for complete aircraft, or EASA Form 1 (see Appendix I), for other products, parts or appliances. This statement shall be signed by an authorised person who holds a responsible position in the manufacturing organisation.

(b) A statement of conformity shall include:

1. for each product, part or appliance a statement that the product or appliance, conforms to the approved design data and is in condition for safe operation; and



2. for each aircraft, a statement that the aircraft has been ground and flight checked in

accordance with 21.A.127(a); and

3. for each engine, or variable pitch propeller, a statement that the engine or propeller has been subjected by the manufacturer to a final functional test, in accordance with point 21.A.128; and

4. additionally, in case of engines, a statement that the completed engine is in compliance with the applicable emissions requirements on the date of manufacture of the engine.

(c) Each manufacturer of such a product, **critical** part or appliance shall:

1. upon the initial transfer by it of the ownership of such a product, **critical part as defined in 21.A.308(a)** or appliance; or

2. upon application for the original issue of an aircraft certificate of airworthiness; or

upon application for the original issue of an airworthiness release document for an engine, a propeller, a **critical part as defined in 21.A.308(a)** or appliance, present a current statement of conformity, for validation by the competent authority.

(d) The competent authority shall validate by counter-signature the statement of conformity if it finds after inspection that the product, **critical** part or appliance conforms to the applicable design data and is in condition for safe operation.

(e) When transferring ownership of non-critical parts, they may be documented in the same manner as critical parts or, in the alternative, another document may be issued by the organization stating that the part was produced and inspected in accordance with this subpart. When another document is used, such parts and their associated documentation do not require validation by the competent authority.

21.A.165 Obligations of the holder

The holder of a production organisation approval shall:

(a) ensure that the production organisation exposition furnished in accordance with point 21.A.143 and the documents to which it refers, are used as basic working documents within the organisation;

(b) maintain the production organisation in conformity with the data and procedures approved for the production organisation approval;

(c) 1. determine that each completed aircraft conforms to the type design and is in condition for safe operation prior to submitting statements of conformity to the competent authority; or



2. determine that other products, **critical** parts or appliances are complete and conform to the approved design data and are in a condition for safe operation before issuing an EASA Form 1 to certify conformity to approved design data and condition for safe operation;
3. **determine that non-critical parts produced under Part-21, subpart G conform to the design data and are in condition for safe operation before issuing an EASA Form 1 or another document indicating that the article was produced under the production organization approval;**
4. additionally, in the case of engines, determine that the completed engine is in compliance with the applicable emissions requirements on the date of manufacture of the engine;
5. determine that other products, parts or appliances conform to the applicable data before issuing an EASA Form 1 as a conformity certificate.

response **Refer to Section 1**

21.A.31

p. 7

comment 14 comment by: *Yuksel Kenaroglu*
 Limiting the scope of "assigning Criticality Levels" to Maintenance (area) may not be enough.
 This scope assumes that all of the Aircraft Manufacturers never use such parts that requires CL assignment. Aircraft manufacturers may be in the same position like Maintenance Providers to some extend.

response **Refer to Section 1**

comment 147 comment by: *Rolls-Royce Deutschland / DOA Manager D. Stege*
 'The reference to Subpart K (new 21.A.308) in Subpart A 21.A.31 is again increasing the complexity of Part-21 reading and hence complexity in future compliance demonstration for organisation approvals. What's the purpose of keeping Subpart K?

response **Refer to Section 1**

comment 215 comment by: *Laurent Lalaque*
 The proposed modification of the Type Design definition should clearly identify the type of concerned products (ELA1 & ELA2) to be consistent with the proposed §M.A.501(e).
 Proposed text:
 '21.A.31 Type design shall consist of:
 (a) The type design shall consist of:
 2. information on materials and processes, and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product and, for



	<p><u>ELA1 & ELA2 aircraft</u>, the assigned criticality levels, as defined in point 21.A.308, for new parts and appliances to be installed during maintenance;</p>
response	<p>Refer to Section 1</p>
comment	<p>255 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 7/32, point 21.A.31</p> <p>2. PROPOSED TEXT / COMMENT : It is proposed to modify this point to read: “21.A.31 Type design (a) The type design shall consist of: 1. [...]; 2. information on materials and processes, and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product and the manufacturing and release standards assigned criticality levels, as defined in point 21.A.308, for new parts and appliances not requiring the issue of an EASA Form 1 to be installed during maintenance under Regulation (EU) No 1321/2014; [...]”</p> <p>3. RATIONALE / REASON : The proposed amendments establish that the holder of a design approval may categorise the parts and appliances installed under Regulation (EU) No 1321/2014 (i.e. parts and appliances replaceable as per IPC and AMM) in accordance with their criticality. It is a positive aspect to include the manufacturing and release standards in the definition of the product design. The use of the adjective ‘new’ to qualify the term ‘parts and appliances’ gives the impression that the criticality evolves as the part or appliance ages. The classification is not dependent on the age but on the severity of the effects of the part/appliance failure. The use of the term ‘maintenance’ is found too restrictive: some tasks currently performed by AMO might be transferred soon or later to CAMO, as indicated during the E&M STeB held in May-2017. Reference to ‘continuing airworthiness’ or ‘Regulation (EU) No 1321/2014’ seems relevant for current situation and foreseeable future.</p>
response	<p>Refer to Section 1</p>
comment	<p>317 comment by: SAFRAN TRANSMISSION SYSTEMS</p> <p>Chapter 21.A.31: 2. information on materials and processes, and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product and the assigned criticality levels, as defined in point 21.A.308, for new parts and appliances to be installed during maintenance; <u>Comment15</u>: this will introduce 2 Type Design for the same product: one for new parts under DOA/POA and one for maintained parts (STC ?) under Part145. Will the safety level be same, as the requirements will be different?</p>
response	<p>Refer to Section 1</p>

comment	<p>331 comment by: <i>Jeff Conner</i></p> <p>Proposed changes to 21.A.31 Type design</p> <p>(a) The type design shall consist of:</p> <p>2. . . . and the assigned criticality levels, as defined in point 21.A.308, for new parts and appliances to be installed during maintenance;</p> <p>GE Aviation Comment:</p> <p>This added statement makes it clear that should a DAH choose to assign criticality levels to parts, this assignment becomes part of the Type Design. While the intent of this proposed NDA is to "ease the manufacturing requirements for some parts" (see Executive Summary), creating the requirement to treat criticality levels assigned by the DAH as part of the Type Design creates added burden for the DAH and will likely result in limited adoption of the proposed criticality levels.</p>
response	<p>Refer to Section 1</p>
comment	<p>372 ❖ comment by: <i>HEICO Aerospace</i></p> <p>HEICO Comment 1 – Criticality Level - Various Locations</p> <p>Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.</p> <p>Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”</p> <p>As appropriate, replace “Critical” with “Safety Sensitive.”</p> <p>Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See https://www.easa.europa.eu/faq/19013 for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.</p> <p>Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”</p>
response	<p>Refer to Section 1</p>
comment	<p>373 comment by: <i>Embraer S.A.</i></p> <p>The Embraer understands that the assigned Critical Levels, as stated by the proposed 21.A.31, would be part of the Type Design. However, we understand that a change to the definition of Type Design is not desirable, since it is an important concept used</p>

	<p>during international validations, which could lead to misunderstandings due to the lack of harmonization between EASA and other authorities.</p>
response	<p>Refer to Section 1</p>
comment	<p>396 comment by: <i>Aviation Suppliers Association</i></p> <p>The term “criticality level” is a new designation for four different categories of parts and is used widely throughout the NPA (it is 'first' used here in this regulation).</p> <p>The words “critical” and “criticality” are used in many places in aviation regulations and their multiplicitous use (and use for inconsist meanings) has caused confusion already.</p> <p>EASA’s website recognizes that a “general definition does not exist” but that there are currently “basically three different definitions.” See FAQ n.19013, available at https://www.easa.europa.eu/faq/19013. Adding a new term “criticality level” would likely add to this confusion.</p> <p>In addition, the term is used (in a slightly different manner in the EU-US BASA TIP. This usage related to PMA parts, for example.</p> <p>Rather than add yet another use of the word “critical” (and “criticality”) to an already confused history, we recommend replacing the term with a different term. After consultation with others, we are currently recommending replacing the term “criticality level” with the term “category level.”</p> <p>The term “category level” also has the benefit of retaining the same “CL” abbreviation (in the English translation).</p> <p>Finally, there is a benefit to using the new phrase “category level” in place of the term “criticality level.” This effort to categorize parts based on failure modes in order to determine release documentation requirements is a new one. It therefore makes sense to offer a new term, rather than a term that is already in use and brings with it a history of interpretation (especially a problematic history, like “critical”). A new term will allow those using and implementing the new process to embrace it openly without any preconceived notions or deeply seated understandings about what the term “criticality” already means, which could ultimately adversely affect the adoption of the new policy.</p> <p>We would also be open to the use of a new, unique, term that uses terminology that does not already carry regulatory and industry connotations.</p> <p>This comment applies to 21.A.31, and to each subsequent place in the regulations and guidance where the term “criticality level” is used.</p>
response	<p>Refer to Section 1</p>
comment	<p>410 comment by: <i>PPL/IR Europe</i></p>



The use of assigned criticality levels should not be limited to new parts. The concepts of this NPA are just as relevant to parts that have been overhauled or repaired. It would be absurd and inconsistent for a part assigned a criticality level of IV to be installed new with only the requirement for identification of its manufacturer, but then for onerous requirements to be placed on the process and organisations used when it is removed for overhaul or repair.

While the detailed requirements for overhauled and repaired parts need to be elaborated in Part-M and Part-ML, Part-21 needs to provide the appropriate hook.

Proposal

Delete "new"

information on materials and processes, and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product and the assigned criticality levels, as defined in point 21.A.308, for ~~new~~ parts and appliances to be installed during maintenance

response **Refer to Section 1**

comment 441 comment by: *Safran Cabin Germany GmbH DOA 21J.067*

21.A.31(a)2. introduces the additional burden on Design Approval Holders to add the information about assigned CLs to each part and appliance. In case of some thousand parts comprising cabin monuments there is no rationale to accept this additional burden to just preserve the existing safety level.

response **Refer to Section 1**

comment 458 comment by: *Safran Aircraft Engines*

Section 3, §3.1.1, page 7/32

The proposed modification of the Type Design definition should clearly identify the type of concerned products (ELA1 & ELA2) to be consistent with the proposed §M.A.501(e).

Proposed text:

'21.A.31 Type design

(a) The type design shall consist of:

2. information on materials and processes, and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product and for ELA1 & ELA2 aircraft the assigned criticality levels, as defined in point 21.A.308, for new parts and appliances to be installed during maintenance;

response **Refer to Section 1**

21.A.121

p. 7

comment 113

comment by: *ENAC*



response	Usually Part 21 Subpart F organisations do not produce critical parts. The purpose of the NPA may be used to delete part 21 subpart F authorisation and use part 21 subpart G only for producing critical parts
	Refer to Section 1
comment	121 comment by: <i>Luftfahrt-Bundesamt</i>
	<p>The word >sought< should be replaced by >required<.</p> <p><u>LBA-Justification:</u> If the TC-Holder decides that a part can be produced outside POA and is acceptable to be installed into an a/c, why the NAA shall approve or conduct continued surveillance of a manufacturer producing this part. This can lead to a situation that some parts are linked to an EASA F1 and other not, even they have the same part-number.</p>
response	Refer to Section 1
comment	318 comment by: <i>SAFRAN TRANSMISSION SYSTEMS</i>
	<p>Chapter 21.A.121 (a) This Subpart establishes the procedure for demonstrating the conformity with the applicable design data of a product, or part or and appliance for which an EASA Form 1 is sought, and that is intended to be manufactured without a production organisation approval under Subpart G.</p> <p><u>Comment16:</u> how is demonstrated conformity with applicable Type Design for parts not covered by an EASA Form1?</p>
response	Refer to Section 1
comment	319 comment by: <i>SAFRAN TRANSMISSION SYSTEMS</i>
	<p>Chapter 21.A.121 (b) This Subpart establishes the rules governing the obligations of the manufacturer of a product, part, or appliance being manufactured under this Subpart.'</p> <p><u>Comment17:</u> what are the applicable rules to products not manufactured under Part21G approval?</p>
response	Refer to Section 1
comment	334 comment by: <i>Leonardo Helicopters</i>
	It is suggested to replace "sought" with "required".
response	Refer to Section 1
comment	432 comment by: <i>ARSA</i>
	ARSA agrees with the proposed amendment to 21.A.121.

response [Refer to Section 1](#)

21.A.131

p. 7-8

comment 115 comment by: ENAC

1) The CA should be provided by the applicant with the evidence of the criticality of the parts and appliances they intend to produce during the application phase in order the CA can assess adequately the eligibility of the applicant. This seems not clearly considered/stated in the context of the NPA.

2) Why do not allow production organisations to apply/maintain a production approval for parts and appliances for which EASA Form 1 is not required instead of forcing them to obtain a new certification, like EN 9100?

response [Refer to Section 1](#)

comment 122 comment by: Luftfahrt-Bundesamt

The word >sought< should be replaced by >required<.

LBA-Justification: If the TC-Holder decides that a part can be produced outside POA and is acceptable to be installed into an a/c, why the NAA shall approve or conduct continued surveillance of a manufacturer producing this part. This can lead to a situation that some parts are linked to an EASA F1 and other not, even they have the same part-number.

response [Refer to Section 1](#)

comment 256 comment by: AIRBUS

1. PARAGRAPH / SECTION :
NPA 2017-19, pages 7-8/32, point 21.A.131

2. PROPOSED TEXT / COMMENT :
It is proposed to modify this point to read:
"21.A.131 Scope

This Subpart establishes:

(a) the procedure for the issuance of a production organisation approval for a production organisation showing conformity of products, or parts ~~or~~ appliances for which an EASA Form 1 ~~or Form 52~~ is sought, with the applicable design data; [.....]"

3. RATIONALE / REASON :

The term 'product' means an aircraft, engine or propeller. For engines and propellers, an EASA Form 1 is sought, but not for aircraft for which an EASA Form 52 is sought.

response [Refer to Section 1](#)



comment	320	comment by: <i>SAFRAN TRANSMISSION SYSTEMS</i>
	<p>'21.A.131 Scope This Subpart establishes: (a) the procedure for the issuance of a production organisation approval for a production organisation showing conformity of products, or parts or and appliances for which an EASA Form 1 is sought, with the applicable design data; (b) the rules governing the rights and obligations of the applicant for, and holders of, such approvals.'</p> <p><u>Comment18</u>: what are the applicable procedures to products not manufactured under Part21G approval?</p>	
response	Refer to Section 1	
comment	321	comment by: <i>SAFRAN TRANSMISSION SYSTEMS</i>
	<p>21.A.131 Scope This Subpart establishes: (a) the procedure for the issuance of a production organisation approval for a production organisation showing conformity of products, or parts or and appliances for which an EASA Form 1 is sought, with the applicable design data; (b) the rules governing the rights and obligations of the applicant for, and holders of, such approvals.'</p> <p><u>Comment19</u>: what are the applicable rules to products not manufactured under Part21G approval (including change to Type Design and deviations to Type Design) ?</p>	
response	Refer to Section 1	
comment	335	comment by: <i>Leonardo Helicopters</i>
	It is suggested to replace "sought" with "required".	
response	Refer to Section 1	
comment	336	comment by: <i>Leonardo Helicopters</i>
	This requirement means that a supplier that manufactures parts classified CL1 shall have a POA, and this requirement shall be addressed to the suppliers.	
response	Refer to Section 1	
comment	351	comment by: <i>Jeff Conner</i>
	Should a DAH choose to assign criticality levels to parts "as defined in point 21.A.308", the DAH would do so based solely on considerations related to the DAH's type design. Language needs to be added here and elsewhere that makes it clear the that CLs assigned by a DAH apply ONLY to parts approved by the DAH. Extension of CLs to replacement parts, repairs or alterations developed without the involvement	

	of the original DAH should be prohibited. The regulatory language must be clear that the DAH for a replacement part, repair or alteration must make their own CL decision independent of decisions made by the original part/design DAH.
response	Refer to Section 1
comment	433 comment by: ARSA ARSA agrees with the proposed amendment to 21.A.131.
response	Refer to Section 1

21.A.263

p. 8

comment	50 comment by: Lantal The four (4) defined criticality levels for new parts and appliances could be reduced to two (2). Either part is critical OR it is not. Either there is a need of an EASA Form 1 OR no need of it. Clear picture & understanding should be made as which "scenario" could lead a project to a critical direction and that needs to be defined together with DOATL.
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response **Refer to Section 1**

comment	72 comment by: LHT DO 1. Please check the numbering of the privilege. From our point of view privilege No 8 should be "...certain major changes..." (i.a.w. opinion 07/2016). 2. Please clarify the meaning of "By derogation from 21.A.103". We do not understand this reference, as 21.A.103 is not a privilege. 3. From our point of view this privilege is contracticted by the classification criteria for a change of the CL of part, as they do not allow a minor classification. Please introduce classification criteria based on an assessment of the effect on safety of the affected part. 4. Please do not distinguish in the privileges between the design approval holder and the non-design approval holder, in particular when it comes to changes that might have no or no appreciable effect. Please introduce privileges and classification criteria following the same principles as changes to the type design. If a DOA cannot assess the effect of a change, it has to consult with the OEM. This is a proven standard practice for changes to the type design and should be transfered to changes to the CL of a part.
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response **Refer to Section 1**

comment	148 comment by: Rolls-Royce Deutschland / DOA Manager D. Stege The derogation is specific for 21.A.103(a). Does that mean 21.A.103(b) is fully applicable and each change of CLs must be treated as minor change and justified against 21.A.95 and potentially under CPS 21.A.101? Clarification is requested.
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response [Refer to Section 1](#)

comment 191 comment by: Airlines for Europe (A4E)

Paragraph/Headline: 21.A.263(c)8

NPA Text subject to comments (abbreviated as applicable):

'8. by way of derogation from 21.A.103(a) and for the design for which it holds the approval, to approve the assignment, or amendments thereto, of the criticality levels (CLs) of parts and appliances, in accordance with point 21.A.308.'

Comment:

The proposed NPA 2018-19 introduces a new par. 21.A.263(c)8. Please note that Opinion No. 07/2016 (Level of Involvement) also introduces new par. 21.A.263(c)8 plus a new par. 21.A.263(c)9.

response [Refer to Section 1](#)

comment 219 comment by: Lee Carslake

Suggest that there is potential for allowing the classification if accomplished by the type certificate holder to be considered a minor change. If the classification submission is performed by a DOA, other than the type certificate holder then this should be considered a major change as the DOA will not have access to world wide fleet reliability data.

response [Refer to Section 1](#)

comment 257 comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 8/32, point 21.A.263

2. PROPOSED TEXT / COMMENT :

The NPA does not address the case of minor modifications subject to 21.A.103(b): who will assign the criticality level ?

3. RATIONALE / REASON :

Currently, this paragraph of the NPA does not introduce a requirement and should be deleted: The auxiliary verb used in the paragraph (a) is 'may'.

response [Refer to Section 1](#)

comment 372 ❖ comment by: HEICO Aerospace

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of "Criticality Level" for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.



Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”

As appropriate, replace “Critical” with “Safety Sensitive.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

comment 399

comment by: DGAC France

Proposed CL’s definitions of 21.A.308 imply that the CL for a given part is dependent on the functions covered by that part. This being said, limiting 21.A.263(c)8 privilege to the holder of a given definition/design might be an issue. As an example, if we take the case of a Satcom system installed by DOA Nb.1 through STC-1 in order to provide Satcom communication capabilities in the passenger compartment. In that context, a CL IV might be considered suitable for the Satcom receiver. Several years after, DOA Nb.2 implements STC-2 in order to provide the aircraft with ADS-B Out capabilities using the existing and certified Satcom system installation (STC-1) as a pre-requisite. In that new context, the Satcom receiver becomes a much more critical piece of equipment and its assigned CL certainly needs to be reassessed as part of STC-2 certification programme.

In the NPA, only DOA-1 seems to be allowed to reassess CLs assigned to equipment installed as part of STC-1 which is a prerequisite to STC-2. DOA Nb. 2 is then not allowed to lower the CL assigned to the receiver. As long as 21.A.113(b) requirement remains, The French authority doesn’t see any shortfall in term of safety if 21.A.263(c)(8) read as follows: “By way of derogation from 21.A.103(a), to approve the assignment, or amendments thereto, of the criticality levels (CLs) of parts and appliances, in accordance with point 21.A.308”.

response **Refer to Section 1**

21.A.307 is deleted

p. 8

comment 207

comment by: Ferhan SADIKOGLU

Although this part is not a crucial part in terms of Part-21 content, it provides a good understanding to establish causal link between aircraft design/production and operation/maintenance.

response **Refer to Section 1**



New 21.A.308

p. 8-9

comment	7	comment by: <i>Prof. Filippo Tomasello</i>
	<p>The competence of the Agency already includes Unmanned Aircraft Systems (UAS) even if only above 150 kg. new rule 21.A.308 should hence cover also UAS.</p> <p>Please amend (a)(1)(iii) therein to read: "cause physical distress or excessive workload for the flight or remote crew and impair their ability to perform their tasks." "</p>	
response	Refer to Section 1	
comment	8	comment by: <i>Prof. Filippo Tomasello</i>
	<p>item (a)(2)(iii) should also cover UAS. Please amend to read: "cause physical discomfort to or significant increase in workload for the flight or remote crew."</p>	
response	Refer to Section 1	
comment	15	comment by: <i>Yuksel Kenaroglu</i>
	<p>It will be stated one more time: Is this requirement for CL assignment applicable to Maintenance Area only? When the part or appliance installation considered, there may not any difference between Maintenance and Aircraft Production!</p>	
response	Refer to Section 1	
comment	38	comment by: <i>Philip Young</i>
	<p>We need an interpretation of the difference between a "Large" reduction (21.A.308 (a) (1)) and a "Significant" reduction (21.A.308 (a) (2)). A large reduction is significant.</p>	
response	Refer to Section 1	
comment	54	comment by: <i>TAP Maintenance & Engineering</i>
	<p>c) it should be "...upon operator" request and not owner. As nowadays almost every airline leases A/C instead of buying them. There is no need to amend all the agreements with lessors to include the need to request CL to the TC Holder.</p> <p>d) If the TC Holder does not agree with this NPA, all parts shall be classified as CLI thus not allowing this rule to produce its effects. EASA should oblige TC Holder to classify all parts installed in A/C.</p>	
response	Refer to Section 1	



comment	<p>59 comment by: AIR FRANCE / ZYLAWSKI Christine</p> <p>21.A.308 "Criticality levels for new parts and appliances to be installed during maintenance" :</p> <p>The definitions of Criticality levels are very close to those of level of safety described in CS-MMEL, a slight alignment could be done. Furthermore, CL I, II and III are very similar and could lead to different reading by DAH. The number could be reduced in order to simplify. Two CL might be sufficient: parts and appliance that would need to be manufactured under a POA and commercial parts that would not need a POA as there is no impact on safety.</p> <p>The risks we identify are:</p> <ul style="list-style-type: none"> o Two distinct Design Approval Holder (DAH) could attribute a different CL for the same part (identical PN). This would generate an unnecessary burden during incoming inspection. o We could imagine that a CL for a part might vary depending on the location on the product the part is used.
response	<p>Refer to Section 1</p>

comment	<p>66 comment by: Hiroaki Takahashi</p> <p>Attachment #3</p> <p>1. As for the proposed rules, we can know the assigned criticality level (CL) by the "list of the CLs" for the parts and appliances. In this way, we need to obtain the latest "list of the CLs" from every manufacturer. This is not realistic way.</p> <p>So we request EASA to consider the following way; Assigned criticality level (CL) shall be indicated on the certification documents (i.e. EASA Form 1, CofC) and/or CMM to prevent the misoperation of receiving inspection.</p> <p>2. In the Regulation (EU) No 1321/2014 Annex I (Part M), EASA Form 1 is used for the Export Certificate as follows. Appendix II — Authorised Release Certificate — EASA Form 1 1. PURPOSE AND USE 1.3. The Certificate is acceptable to many airworthiness authorities, but may be dependent on the existence of bilateral agreements and/or the policy of the airworthiness authority. The 'approved design data' mentioned in this Certificate then means approved by the airworthiness authority of the importing country.</p> <p>Japan Civil Aviation Bureau allow us to accept only EASA Form 1 issued as Export Certificate of Airworthiness for spare parts. (see attached)</p> <p>In case of CL II, III and IV, how can we know the parts/appliances was approved by the airworthiness authority of the importing country?</p> <p>We request EASA to amend the 21.A.308 to include the requirement that "the parts/appliances shall be categorized CL I, when it is approved by the airworthiness authority of the importing country".</p>
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response [Refer to Section 1](#)

comment 73 comment by: *LHT DO*

Please clarify: Are these criteria identical with the criteria for safety assessment in accordance with 25.1309? If yes, that is okay. If not, the criteria might be too weak.

response [Refer to Section 1](#)

comment 75 comment by: *René Meier, Europe Air Sports*

21.A.308 Criticality levels for new parts and appliances...

p 8/32

(a)

This paragraph is beautifully phrased, we think, however, that non-native speaker will have to read it several times to find out how many aspects it covers.

Rationale

There are in our view too many combinations of functions and situations, of existing and future opportunities that translation in all the official languages of the Union will be difficult and produce texts creating confusion.

(1) (2) (3) (4) are understood, but provoke questions: Who assigns and imposes these Criticality Levels?

Rationale

in a sports and recreational aviation environment where physical discomfort to passengers may not be compared with physical discomfort of airliner passengers?

And: To owners of a sailplane it is obvious that the installation of a new soaring flight director falls within Criticality Level IV. To convince certifying staff of the reasonableness of this classification is, we believe, given, but what about the regulators?

Remark

Knowing well the specificities of our segments of activities, at the same time being familiar with the needs of commercial transport operations, we offer the Agency our full support and assistance when appropriate Acceptable Means of Compliance and Guidance Material are to be prepared.

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response [Refer to Section 1](#)

comment 79 comment by: *René Meier, Europe Air Sports*

21.A.308 Criticality levels for new parts and appliances...

p 9/32

(d)



The Agency's proposal to assign Criticality Level I under the circumstances described is in our view not proportionate. More flexibility is needed, it should be explained what we have to understand when reading about "operational needs" and what kind of parties are accepted as being affected.

Rationale

What may be appropriate for CS-25 and CS-29 aircraft is not necessarily offering the best possible way to deal with such a situation when it comes to CS-22, CS-23, CS-27 aircraft, we think.

response **Refer to Section 1**

comment 99 comment by: Air Cost Control USA

PROPOSED CHANGE (IN BOLD):

21.A.308 (c)

*When assigned following (a), the design holder shall make available the list of the CLs for the parts and appliances, and further changes to it, to each known owner of one or more aircraft, engines or propellers, that contain such design, and upon owner's request, to any interested person. **An interested person is deemed to have the owner's request if they possess a written instructions to procure the parts and appliances on their behalf.** The list shall also be provided by the design holder to the competent authorities upon request.*

Rationale: This addition is respectfully requested in order to make the process, by which maintenance organizations and distributors procure parts, more efficient under this clause. Interested parties can implied via purchase orders originating from the owner.

response **Refer to Section 1**

comment 103 comment by: FFVV

The proposals made in the paragraphs 21A308 and 21A309 are a step in the right direction, but they are still too demanding for some parts concerning ELA1 and ELA2. For these aircrafts, the realization of all parts, even the primary structure or flight controls parts, should be possible by the owner when he has the definition data of the parts. We often need this when repairing gliders or aircrafts when structural parts need to be re done.

For ELA1 and ELA2, it is therefore necessary to simplify the system or create a CL V that would allow the owner to redo all the parts as long as he has the design data from TC OLDER. After manufacture, it would establish a certificate of conformity (Cofc) in order to be able to assemble the part or the piece of structure.

response **Refer to Section 1**

comment 108 comment by: FNAM



	<p>ISSUE</p> <p>The criticality level attribution is not mandatory for the holder. FNAM and GIPAG fear that, considering the involved responsibility, very few holders will choose the CL option. As a consequence, most parts will be CLI, <i>i.e.</i> EASA Form 1 or equivalent. It can also be quite hard for a holder to decide and assign a CL only thanks to his/her subjective judgement on the safety impact of a part. That is why, FNAM and GIPAG ask for the creation of a GM providing a list of parts with their associated CL. It is a guideline for the holder to select the proper CL and to avoid over-classified parts and appliances.</p> <p>PROPOSAL</p> <p>Add a GM which can be an example for the holder with several types of equipment associated with their proper CL</p>
response	Refer to Section 1
comment	<p>132 comment by: <i>Fédération Française Aéronautique</i></p> <p>The FFA questions the optimism of the agency (4.4.4 Option 1), which is betting on a spontaneous and unreserved acceptance of the DAH/TCH of these new rules. As it says in the NPA, they will suffer an immediate economic impact by a need for resources to allocate the CL, to which will be added the loss of profit of the parts bought to the industry and resold "often widely raised" to the air operators/owners without added value.</p> <p>This remark "often widely raised" does not concern EU products only but also US and other. We could cite the case of many parts only identifiable by the Part Number of the Illustrated Parts Catalog of DAH/TCH. When after research, often complicated, the manufacturer and the price of the product are discovered it is noted, by comparison, that the price requested by the DAH/TCH is not reasonable. The position of the DAH/TCH will be all the easier as the regulation is in its favor. The DAH/TCH:</p> <ul style="list-style-type: none"> - <u>May</u> for the parts and appliances that it has designed assign CLs - <u>Decide alone</u> the CLs allocation - <u>May not</u> assign CLs to his parts. In this case CL I is assigned by default - <u>Can</u>, at any time, reduce CL of a part (<i>i.e.</i> CL III to CL I) <p>In order to avoid possible abusive monopoly situations, 21.A.308, must give to DAH/TCH both "rights and duties". We believe that 21.A.308 (d) must specify the "duties" too.</p> <p>Also, to strike the right balance, any air operator/owner who can justify that, a non-value-added industry-made part is sold by the DAH/TCH with a low non-compliant CL (or CL 1 by default) can send a CL change request to EASA (or NAA). After study, EASA (or NAA) may decide to assign a new adapted CL. This would allow the air operator/owners to choose to buy the part directly from the manufacturer.</p>
response	Refer to Section 1
comment	<p>149 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i></p> <p>This proposal is not supported by RRD. The TC Holder should not be used to manage logistic conditions during service life!</p>



response	Refer to Section 1	
comment	150	comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>
	The text should be moved directly under Subpart A.	
response	Refer to Section 1	
comment	151	comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>
	The requirement should clarify that the TC Holder could only justify criticality levels against its own Type Design! Any STC, approved changes or repairs by third parties or special conditions accepted in the Airworthiness Certificate of an individual aircraft are not known and hence not assessed. The NPA doesn't provide sufficient provisions to compensate for such safety risk.	
response	Refer to Section 1	
comment	152	comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>
	Why is a different approach required as already established by failure assessment in current CSs? What's the reason? Why should that CL code go into European law, while technical failure or safety assessments are defined on CS level (only)? That is very prescriptive and not in line with the simplification approach in rulemaking.	
response	Refer to Section 1	
comment	153	comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>
	under(c): Why 'owner' and not 'operator'? How can the TC holder verify ownership?	
response	Refer to Section 1	
comment	173	comment by: <i>SAFRAN Electronics & Defense</i>
	We are worried about the possible confusion between Critical parts in the sense of 21.A.805 (i.e. possibly which design imposes some limitations in maintenance (think ALS) but not necessarily with a strong CL) and Critical parts in the sense 'CL I'.	
response	Refer to Section 1	
comment	177	comment by: <i>EHA</i>
	<ul style="list-style-type: none"> Do the CL classifications apply to rotables, consumables, standard parts and raw material? M.A.501 indicates "Components", however, not clear prior to this in 21.A.308. E.g. Page 9: 21.A.308 (d) may need to be clarified that this doesn't include standard parts or raw material. 	

	<ul style="list-style-type: none"> ○ Made potentially confusing via mix of terms ie. “Component” (M.A. 501) vs. “Parts or appliances” (21.A.308, 21.A.309, GM 21.A.91).
response	Refer to Section 1
comment	<p>189 comment by: Airlines for Europe (A4E)</p> <p>NPA Text subject to comments (abbreviated as applicable): [...] parts classified into certain CLs can be more easily procured by organisations (or persons) performing maintenance, and can be installed on an aircraft without significantly affecting its airworthiness.</p> <p>Comment: In the NPA proposal a new point 21.A.308 is added in which the Criticality Level for new parts and appliances is defined. CL II parts are parts “whose failure would cause a significant reduction in functional capabilities or safety margin”. The proposal would allow CL II parts to be installed on the aircraft without an EASA Form 1. This appears to be in contradiction with the benefits of this NPA as described in par. 2.4, because a significant reduction in functional capabilities or safety margin would significantly affect the airworthiness of the aircraft. The proposed text does not require an EASA Form 1 for a CL II part when failure does have a significant affect on the airworthiness of the aircraft. For criticality level CL II parts, one would expect that the issue of an EASA Form 1 is required.</p>
response	Refer to Section 1
comment	<p>190 comment by: Airlines for Europe (A4E)</p> <p>NPA Text subject to comments (abbreviated as applicable): (a) The applicant for, and the holder of, a design approval of a product, a change or a repair, the holder of a standard change or a standard repair and the holder of an ETSO article authorisation (hereinafter jointly referred as ‘design holder’) may, for the parts and appliances that it has designed or has identified in the design and that are not ETSO articles nor products, assign criticality levels (CLs) which shall be applicable to new parts and appliances to be installed during maintenance, in compliance with the following four levels: (1) CL I for parts and appliances whose failure would: (i) cause a large reduction in functional capabilities or safety margin [...] (2) CL II for parts and appliances other than those assigned CL I, whose failure would: (i) cause a significant reduction in functional capabilities [...] (3) CL III for parts and appliances other than those assigned CL II, whose failure would: (i) cause a slight reduction in functional capabilities [...] (4) CL IV for parts and appliances other than those assigned CL III, II or I.</p> <p>Comment: (1) same as in comment to NPA point 2.4 (2) In NPA the new article 21.A.308 describes the Criticality Levels. - In this proposed text a “higher” Criticality Level (CL) has a lower numerical value! And when the Criticality Level goes to “low” the number goes up (= becomes higher). This is illogical</p>



to normal understanding. It is also not consistent with the method of Risk Classes for the Level of Involvement (LOI) that EASA intends to introduce per Opinion No. 07/2016. In the LOI risk assessment, Risk class 1 means a minimum involvement from EASA in the certification process, whereas Risk Class 4 means a maximum involvement from EASA. EASA is requested to reverse the numbering of Criticality Levels to improve readability, logical understanding and consistency within EASA rulemaking. At the same time (just as under LOI rulemaking) we would like to request to use CL numerals in Arabic (1,2,3,4), not Roman (I, II,III,IV).

(3) In the NPA, the new point 21.A.308 introduces criticality level definitions that differentiate between "large reduction", "significant reduction" and "slight reduction". The wordings 'large', 'significant' and 'slight' are subjective. EASA is requested to provide criteria or guidance on how to interpret these definitions of the criticality levels.

response **Refer to Section 1**

comment 192 comment by: Airlines for Europe (A4E)

NPA Text subject to comments (abbreviated as applicable):

(a) The applicant for, and the holder of, a design approval of a product, a change or a repair, the holder of a standard change or a standard repair and the holder of an ETSO article authorisation (hereinafter jointly referred as 'design holder') may, for the parts and appliances that it has designed or has identified in the design and that are not ETSO articles nor products, assign criticality levels (CLs) which shall be applicable to new parts and appliances to be installed during maintenance, in compliance with the following four levels:

(1) CL I for parts and appliances whose failure would: (i) cause a large reduction in functional capabilities or safety margin [...]

(2) CL II for parts and appliances other than those assigned CL I, whose failure would: (i) cause a significant reduction in functional capabilities [...]

(3) CL III for parts and appliances other than those assigned CL II, whose failure would: (i) cause a slight reduction in functional capabilities [...]

(4) CL IV for parts and appliances other than those assigned CL III, II or I.

Comment:

The definitions of Criticality levels are very close to those of level of safety described in CS-MMEL, a slight alignment could be done. Furthermore, CL I, II and III are very similar and could lead to different reading by DAH. The number could be reduced in order to simplify. Two CL might be sufficient: parts and appliance that would need to be manufactured under a POA and commercial parts that would not need a POA as there is no impact on safety.

response **Refer to Section 1**

comment 193 comment by: Airlines for Europe (A4E)

NPA Text subject to comments (abbreviated as applicable):

(a) The applicant for, and the holder of, a design approval of a product, a change or a repair, the holder of a standard change or a standard repair and the holder of an

ETSO article authorisation (hereinafter jointly referred as 'design holder') may, for the parts and appliances that it has designed or has identified in the design and that are not ETSO articles nor products, assign criticality levels (CLs) which shall be applicable to new parts and appliances to be installed during maintenance, in compliance with the following four levels:

(1) CL I for parts and appliances whose failure would: (i) cause a large reduction in functional capabilities or safety margin [...]

(2) CL II for parts and appliances other than those assigned CL I, whose failure would: (i) cause a significant reduction in functional capabilities [...]

(3) CL III for parts and appliances other than those assigned CL II, whose failure would: (i) cause a slight reduction in functional capabilities [...]

(4) CL IV for parts and appliances other than those assigned CL III, II or I.

Comment:

According to the proposed text all design holders may assign criticality levels to their new parts and appliances. However, only the design holder of the aircraft type design can determine whether failure of the parts and appliances in its type design will cause a large reduction in functional capabilities or safety margin, since the latter two refer to consequences at aircraft level caused by failure of parts and appliances. CL's can therefore, in our opinion, only be determined by the design Holder of the aircraft (TC/STC), not by all design holders in general.

response **Refer to Section 1**

comment 194 comment by: *Airlines for Europe (A4E)*

Paragraph/Headline: 21.A.308(b)

NPA Text subject to comments (abbreviated as applicable):

b) Notwithstanding point (a), the design holder referred to in (a) may decide to assign a lower CL to a part or appliance than the CL that would correspond to the part or appliance under (a).

Comment:

Different CL's for the same partnumber: And even assuming the design holder of the aircraft has the final say in the determination of the CL of a certain part of component and also assuming that the same part is built-in both in an Airbus aircraft as well as a Boeing aircraft: the failure of this part can have different consequences on aircraft level for the Airbus aircraft as compared to the Boeing aircraft. So the same part can have different CL's. This is very confusing for Incoming Goods personnel.

response **Refer to Section 1**

comment 208 comment by: *Ferhan SADIKOGLU*

It's very unclear how the CL levels will be assigned by design holders. Inevitably there will be inconsistent decisions among the results, where for a part some design holders may think CL level as CL I and others may assert it is CL II or CL III. Who will direct design holders to make consistent judgments. What will be the authority's role and responsibility?



In addition, in which levels critically levels will be given? there are more than a million parts in a common narrow body aircraft. So, will CL be identified for each part? Or will it be restricted in some component level? It's unclear.

For example think about galleys, some designers may claim that galleys fall into CL II, the others may say it is CL I. Some others may think most of the parts on a galley are CL II even CL III but the attachment part of the galley to the aircraft points are very critical thus they should be CL I.

In conclusion, I respect the idea of making life easier for all parties in producing and installation of aircraft parts but I am not sure this proposed change will work for that. Instead it will make things harder and difficult to manage. what should be done is to facilitate to issue Form-1 for production organisations. For example production organisations which are located outside of EU territory but approved by EASA are not allowed to issue EASA Form-1 if there is a non-EASA design, which the production organisations have difficulties to explain to airline customers. Firts thing I believe should be to solve this chaos. secondly, I highly propose to make "commercial parts" well defined and available in the regulation. In this way I believe that most of this certification problem will be disappeared.

Finally, I suppose that only 2 CL classifications will work ideally. One of them is for commercial parts and the other for "others".

response **Refer to Section 1**

comment 221 comment by: *British Airways Engineering*
CL level lower-higher anomaly. Please see our oppinion at 21.A.309

response **Refer to Section 1**

comment 231 comment by: *Alexander KOBZAR*
We are asking to include requirement that the list of CL's for parts must be on 'part number level' rather than "by part nature level" (for example, statements like "interior aircraft marking is considered as CL4" are not allowed).

response **Refer to Section 1**

comment 232 comment by: *Alexander KOBZAR*
Introduction of CL's other than CL1 in our opinion will create a gap in coordination between Design and Production organisations. While for CL1 the requirement for appropriate coordination between DO and PO exists and therefore remains the subject of Agency surveillance on both sides, in case of CL2 and CL3 such coordination becomes not mandatory and therefore not controlled from the Agency side. This potentially may lead to loss of feedback from production to design organization on the one side, as well as loss of design support from DO to PO on the other side. Finally, this could lead to situation, where parts are manufactured without



response	appropriate design support from DO, or Configuration control problems on DO side due to lack of feedback from PO.
	Refer to Section 1
comment	<p>233 comment by: <i>Alexander KOBZAR</i></p> <p>We are in doubt if the change of CL of the part is allowed to DOA's who are not original design holders of the part. The restriction of changing CL of the part must be clearly provided in the regulation. In other case, we expecting there may be certain cases, where DOA's could re-classify parts by increasing criticality level in order to reduce manufacturing standards for parts initially classified by Design Holder as a lower CL.</p>
response	Refer to Section 1
comment	<p>234 comment by: <i>Alexander KOBZAR</i></p> <p>Criticality level classification. As it is understood, the current classification is linked to the safety consequences of part failure and this is expected to be accessed by holder of design approval, as well as by holder of design change approval. This causes confusion with the process of design changes classification described in 21.A.91 which considers effect on the airworthiness compliance. Trying to combine these two classifications we have found that current description of CL1 in all cases leads to design change classification (both, where new part introduced to Type design or original one is modified) as Major. On the other hand, where the Minor design change can not be linked with parts CL1. AS a result, following this logic Minor changes are linked to CL levels 2 or higher, which means that the manufacture of these parts falls out of Agency surveillance umbrella. Our position is based on the type design changes approval process, which is based on compliance demonstration even for Minor design changes. As a result, we are considering that the criticality level introduced by the amendment should be linked to compliance demonstrations rather than to additional safety assessment of each individual part. We believe that appropriate safety level is assessed and assured through the system of Certification Specifications and Type design and type design changes certification process. From this point of view, we are expecting the following description of CL's: CL1 – for parts affecting the compliance demonstration of type design or type design change/repair; CL2 – for parts other than classified as CL1. (Example 1, Minor design change introduces a new plastic interior part, which means performance of flammability tests. Compliance with design data in terms of appropriate materials used is essential for production of such parts in order to ensure compliance with CS and therefore provision of adequate level of safety. This case is likely to be classified as CL1 and subsequent Production Approval is required. Example 2, minor changes introduces a new metal plug in the aircraft galley. Following change classification it has been shown that there are no CS requirements affected by the part. This part may be considered as not linked to compliance demonstration and therefore may be classified as CL2). Setting of a manufacturing standard (Quality Management System standard) may be performed by DAH by means of specifying of Supplier name in design data, if necessary.</p>
response	Refer to Section 1



comment	<p>241 comment by: Safran Landing Systems</p> <p>The newly proposed 21.A.308 indicates that: <i>(c) When assigned following (a), the design holder shall make available the list of the CLs for the parts and appliances, and further changes to it, to each known owner of one or more aircraft, engines or propellers, that contain such design, and upon owner's request, to any interested person. The list shall also be provided by the design holder to the competent authorities upon request.</i></p> <p>Will this list be available in the TCDS? Down to which level of Parts & appliance will this list be necessary? Will this list also be available to DOA non-TCH?</p>
response	<p>Refer to Section 1</p>
comment	<p>242 comment by: Safran Landing Systems</p> <p>Classification proposed in 21.A.308 is not fully aligned with content of CS25 AMC 25.1309 §7 and 8.</p>
response	<p>Refer to Section 1</p>
comment	<p>258 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 8/32, point 21.A.308</p> <p>2. PROPOSED TEXT / COMMENT : It is proposed to replace the point 21.A.308 title and the paragraph (a) by : “21.A.308 Parts and appliances to be installed under Regulation (EU) No 1321/2014 (a) When the applicant for, or the holder of, a type-certificate, restricted type-certificate, supplemental type-certificate or, change or repair design approval (hereinafter jointly referred as ‘design holder’) elects to publish the list of parts and appliances not requiring the issue of an EASA Form 1 and of the related manufacturing and release standards, it shall make it available as part of the instructions for continued airworthiness.”</p> <p>Although Airbus supports the concept of criticality levels (it provides equity and progressiveness of the rule), it is believed that there is room for improvement of the manner it is introduced. The matter is a “right fit candidate” to introduce a performance-based regulation. Airbus is in favour of a performance-based requirement providing an objective to reach and some flexibility in the way to achieve it by using soft laws. Further, attention should be paid to CS requirements already using the ‘critical’ terminology, e.g. to define the term ‘critical part’:</p> <ul style="list-style-type: none"> · CS 27.602 and CS 29.602 ‘Critical parts’ · CS-E-15(e) ‘Engine Critical Part’ <p>CS-25 should be amended to introduce the definition of ‘critical part’ in the context of large aeroplanes. Some other CS may be similarly affected.</p> <p>3. RATIONALE / REASON :</p>

Currently, this paragraph of the NPA does not introduce a requirement and should be deleted: The auxiliary verb used in the paragraph (a) is 'may'.

The CL criteria, inspired by the AMC 21.A.3B(b) that details acceptable means to determine unsafe conditions in front of occurrence reporting, should be introduced as "soft laws", i.e. CS/AMC/GM rather than requirements in the Implementing Rules. This with the aim to ensure consistency with the objectives specified in the Certification Specifications. The analysis may be qualitative or quantitative. Analysis supported by test, modelling techniques, System Safety Assessment (SSA), or reliability figures exist in the frame of product type certifications and could justify the assignment of a criticality level. For instance, the techniques which are developed for the compliance with CS could form an acceptable means of compliance. In addition, it would be appropriate to clarify if an engineering judgement can validate a CL assignment as a standalone justification.

It is believed that standard changes and repairs, and ETSO should be excluded because (respectively):

- Standard changes and repairs should not affect the CL: the definitions for standard changes/repairs state that these changes "are not in conflict with TC holders data".
- Point 21.A.602B requires that "Any applicant for an ETSO authorisation shall demonstrate its capability [...] for production, by holding a production organisation approval, issued in accordance with Subpart G, or through compliance with Subpart F procedures". Therefore, the issuance of an EASA Form 1 should not be an issue. The costs associated with the process to obtain and hold any organisation approval (incl. a production approval) are substantial. But it is believed that the issuance of an EASA Form 1, taken in isolation, is not prohibitively expensive.

response **Refer to Section 1**

comment 259 comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 9/32, point 21.A.308

2. PROPOSED TEXT / COMMENT :

It is proposed to delete the paragraph (b) of this point.

3. RATIONALE / REASON :

The auxiliary verb used in this paragraph is 'may'. Currently, this paragraph does not introduce a requirement and should be deleted.

response **Refer to Section 1**

comment 260 comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 9/32, point 21.A.308

2. PROPOSED TEXT / COMMENT :

It is proposed to delete the paragraph (c) of this point.



response	<p>3. RATIONALE / REASON : Data should be made available as part of instructions for continued airworthiness in order to ease treatment by CAMO (point M.A.401(b)) and AMO (point 145.A.45(b)). Point 21.A.61 refers.</p> <p>Refer to Section 1</p>
comment	<p>261 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 9/32, point 21.A.308</p> <p>2. PROPOSED TEXT / COMMENT : A paragraph (b) is proposed on the basis of the paragraph (d) of point 21.A.308 of this NPA: “(b) When the list referred to in paragraph (a) is empty or missing, or when the type certificate has been surrendered, an EASA Form 1 shall be issued with all parts and appliances, unless the Agency, considering the operational need, decides otherwise upon request of an affected party.”</p> <p>3. RATIONALE / REASON : For sake of consistency with the paragraph (a).</p>
response	<p>Refer to Section 1</p>
comment	<p>262 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 9/32, point 21.A.308</p> <p>2. PROPOSED TEXT / COMMENT : It is proposed to delete the paragraph (e) of this point.</p> <p>3. RATIONALE / REASON : Currently, this paragraph does not introduce a requirement and should be deleted.</p>
response	<p>Refer to Section 1</p>
comment	<p>322 comment by: SAFRAN TRANSMISSION SYSTEMS</p> <p>21.A.308 Criticality levels for new parts and appliances to be installed during maintenance</p> <p><u>Comment:20</u>: this chapter introduce the same standard for CAT as for ELA1 & ELA2 (as defined in 21.A.307), but without transferring the responsibility to the owner (21.A.116). All DOA and POA responsibilities need to be adjusted accordingly.</p>
response	<p>Refer to Section 1</p>
comment	<p>326 comment by: DGAC France</p>

	<p>· Reading proposed 21.A.308, it seems that every single parts and appliances of a product will fit in one of the four levels, including standard parts. The French authority understands that the main difference between standard parts and parts and appliances eligible for a CL is the fact that standard parts definition/design is in the public domain (which is not the case for parts and appliances for which CL's might be assigned).</p> <p>To make it clear that no CL is to be assigned to standard parts, 21.A.308 should read: <i>[...] assign criticality levels (CLs) which shall be applicable to new non-standard parts and appliances to be installed [...]</i>.</p> <p>In addition to that, if standard parts are not explicitly excluded from 21.A.308, what is it expected for standard parts fitting one of the CL's definitions (e.g., is a CL II to be assigned to a standard part the failure of which could possibly injure passengers like NAS screws used to retain a piece of cabin equipment) ?</p>
response	Refer to Section 1
comment	<p>327 comment by: <i>DGAC France</i></p> <p>The French authority suggests including in AMC or GM to 21.A.308, some examples of parts and appliances to be classified in each of the four categories. In fact, as proposed, the definitions can lead to various interpretations. To take again the example of NAS screws, even if standard, what are design holders supposed to assign in term of CL to screws or wires used in highly critical systems?</p>
response	Refer to Section 1
comment	<p>328 comment by: <i>DGAC France</i></p> <p>· The manufacturing standard and release requirements for CL II states that the manufacturer shall be identified in the design data:</p> <p>o</p> <p>It is the intent of the NPA to require the design holder to select suitable manufacturer(s) for CL II parts and appliances?</p> <p>This implies to perform a change to the TC/STC in case of change/addition/removal of manufacturer(s) for a given part.</p> <p>From a legal point of view, in term of accountabilities, how EASA will handle occurrences due to non-conformities to approved design data for parts classified as CL II, III, or IV, and therefore not manufactured under any EASA regulation?</p>
response	Refer to Section 1
comment	<p>337 comment by: <i>Leonardo Helicopters</i></p> <p>Add point (f) When the design holder has assigned a different classification, to the parts and appliances of its design, a cross-reference matrix between the two classification shall be made available to the affected parties.</p>
response	Refer to Section 1
comment	<p>338 comment by: <i>Leonardo Helicopters</i></p>

In point (c), it is strongly suggested to replace "make available the list of the CLs for the parts and appliances" with "make available the CL for the parts and appliances". The drawing up of a list can be misleading and a too heavy requirement to be met and with no added value. Also the evidence of the CL should be a requirement only in case a part or appliance is provided without an EASA Form 1.

response

Refer to Section 1

comment

344

comment by: *Federal Aviation Administration*

Comments on 21.A.308 Criticality levels for new parts and appliances to be installed during maintenance

This NPA would require the design approval holder or type certificate applicant (seeking validation) to define in the design data, CLs for articles/parts. This proposal would eventually offer some relief to US aviation suppliers, but ONLY if the DAH retroactively assigns EASA CL levels to each and every part number.

The proposed EASA classification of parts into four levels of criticality is similar, but not the same as the FAA. In FAA terms, we also have four classes of parts: Critical- as defined in 14 CFR 45.15(c), Standard Parts (AC 21-29D), Commercial Parts (AC 21-45), and any other parts that do not fit the previous three categories but are produced pursuant to 14 CFR 21.8 and 21.8. It is not clear if "Standard Parts" fall into the EASA CL IV category, however, the way the NPA refers to Standard Parts, it appears that they exist outside of the 4 CL levels.

The definitions of the various CLs may be subjective and therefore could cause the design approval holder some anguish during the design certification process, depending on the final certifying authority's subjective opinion of the appropriate CL level to be assigned. (E.g., "cause a slight reduction in functional capabilities", "cause a slight increase in workload for flight crew", "cause physical discomfort to passengers", etc.) The definitions for CLs could lead to a design approval holder being able to classify parts at an incorrect CL to facilitate less supplier oversight, for example, classifying an article as CL III when it should be CL II.

This section uses vague terms without definition with a high potential for differences to result. For example, what is considered "large" vs. "significant" vs. "slight." Significant would seem to be more severe than large, but used here is given a higher CL.

Adding the CL as part of the type design definition seems problematic and not associated with a product's design, but rather how a part's manufacturing is managed. The last sentence states that changes to the CL would be considered a change in type design which would mean that all of these changes would need to be assessed as major or minor in accordance with Subpart D. Taking this a step further, would it be possible for a STC applicant to propose a change to a CL for a part the TCH identified and this to be a major change and eligible for an STC. This would allow STCs to be issued for a purpose that is not intended.

GM 21.A.308(d) seems to imply that a 3rd party could make a request to the agency to "over rule" or revise a CL that has been assigned to a part. As such this is stating that a 3rd party could request the agency to make a type design change to a product and prompt the agency to become a DAH. Likewise, if a TC has been surrendered,



this would require an increase in workload for the agency to manage assigned or not assigned CL.

How would parts be controlled if used differently in various installations or for the case of TSOs which are not dependent on an installation? How does a TSO holder assign a CL when installation may not be known? What if one part is used on the same aircraft in more than one use - does the most critical CL level get defined for these parts? Can we require a DAH to make their type design (i.e. proprietary data) available to the public?

It will be common that the same part number will exist on numerous DAHs lists with a high potential for differences in CL levels meaning they are manufactured in accordance with different standards. Is a PMA holder required to identify (use) the same CL as the DAH defined for the TC and STC? Same issue with TSOs since they are not connected to an aircraft installation, would the TSO holder need to wait until the article is installed by a DAH and what is the DAH used the TSO article differently. Would this prompt differences in "type design" and thus unique part numbers to be defined?

response **Refer to Section 1**

comment 345 comment by: *Graham Hallett, BBAC*

The numerical assignment of numbers to criticality levels seems counter intuitive. In 21.A.308(a), CL1 is clearly the most safety critical and CL4 the least safety critical.

However, in 21.A.308(b) and subsequently, the text refers to a lower CL. While this means a lower numerical CL, it equates in reality to a more safety critical item.

Colloquially, when one says 'a lower criticality level' one would expect to mean a lower level of actual safety criticality. This appears to not be the case as it is written.

response **Refer to Section 1**

comment 350 comment by: *Jeff Conner*

The language in the proposed 21.A.308 (c) states that "the design holder shall make available the list of the CLs for the parts and appliances, and further changes to it, to each known owner of one or more aircraft engines or propellers, that contain such design, and upon the owner's request to any interested person." This language indicates that EASA expects assignment and/or changes to CL to be addressed as changes to ICA.

While the intent of this proposed NDA is to "ease the manufacturing requirements for some parts" (see Executive Summary), creating the requirement to treat criticality levels assigned by the DAH as part of the Type Design and included in ICA requirements creates added burden for DAHs and will likely result in limited adoption of the proposed criticality levels. Additionally, the Criticality Levels defined in this NPA do not align with Safety Analysis categories defined in CS 25.1309 (Catastrophic / Hazardous / Major / Minor / No Safety Effect). Additionally, for turbine engines CS-E 25 requires that ICA address Engine Critical Parts - a nomenclature not included in



the CL levels proposed in this NPA. Failure to use common terminology within EASA regulations will create confusion.

response **Refer to Section 1**

comment 362 comment by: IATA

Existing Text	Comment / Proposed Text	Justification
21.A.308 (a) (3) CL III for parts and appliances other than those assigned CL II, whose failure would:	21.A.308 (a) (3) CL III for parts and appliances other than those assigned CL II or I, whose failure would:	The proposed change is considered to be a clearer wording in line with the stated intent (in the NPA Executive Summary) of “the default option of assigning the most stringent CL to all parts” and consistent with the wording of the 21.A.308 (a) (4) defining CL IV.

response **Refer to Section 1**

comment 366 comment by: IATA

Existing Text	Comment / Proposed Text	Justification
NPA related general question#1 regarding CL assignment	TBD	Please consider if/how a retroactive assignation of CL I (by default) to all in service aircraft parts and appliances would affect the industry

response **Refer to Section 1**

comment 367 comment by: IATA

Existing Text	Comment / Proposed Text	Justification
NPA related general question#2 regarding CL assignment	TBD	Please consider how could we prevent that the same physical part or appliance ends with different assigned CLs by different DAHs even when the aircraft applications (although formally different) are technically identical.



response **Refer to Section 1**

comment

372 ❖

comment by: *HEICO Aerospace*

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “**Criticality** Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “**Criticality** Level” with “**Category** Level.”

As appropriate, replace “**Critical**” with “**Safety Sensitive**.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response

Refer to Section 1

comment

375

comment by: *Embraer S.A.*

Notwithstanding our disagreement aforementioned, it is relevant to note that the CL decreases whenever the criticality of the part increase. We believe that this classification is not intuitive and proposes to assign the higher CL classification to the higher criticality.

response

Refer to Section 1

comment

379

comment by: *HEICO Aerospace*

HEICO Comment 2 – CL Classifications – Page 8

Comment: The proposed CL classifications are vague and leave room for (mis)interpretation. The Failure Effect classifications of: “large reduction,” “significant reduction,” “slight reduction,” and “slight increase” could have differing interpretations between differing DOAs / DAHs.

Suggested Resolutions:

Use existing Failure Condition Classifications for CL1 to CL4. For example (1) CL I for parts and appliances whose failure would:



- (i) be classified as Hazardous or Catastrophic under CS-23, CS-25, CS-27, or CS-29
- (ii) be classified as Hazardous Engine Effects under CS-E
- (2) CL II for parts and appliances other than those assigned CL I, whose failure would:
 - (i) be classified as Major under CS-23, CS-25, CS-27, or CS-29
 - (ii) be classified as Major Engine Effects under CS-E
- (3) CL III for parts and appliances other than those assigned CL II, whose failure would:
 - (i) be classified as Minor under CS-23, CS-25, CS-27, or CS-29
 - (ii) be classified as Minor Engine Effects under CS-E
- (4) CL IV for parts and appliances other than those assigned CL III, II or I. CL1

Justification:

Failure Condition Classifications already exist within existing EASA regulations and guidance material. Using the existing failure condition classifications would significantly reduce the potential of inconsistent classification.

Examples of Failure Conditions can be found in the following AMCs

AMC 25.1309 Paragraph 7

(1) No Safety Effect; (2) Minor; (3) Major; (4) Hazardous; and (5) Catastrophic.

AMC E.510 Paragraph 2

(d) Hazardous Engine Effects; (e) Major Engine Effects; and (f) Minor Engine Effects.

response **Refer to Section 1**

comment **382** comment by: *Nicoulaud*

The definitions of the Critical Levels will be apply to parts/appliances which will be involved in certification process. Therefore they could be involved in failures according to AMC 25.1309 for large aircraft. Why do not refer to applicable AMC1309 ?

response **Refer to Section 1**

comment **394** comment by: *Aviation Suppliers Association*

Subsection (a): has a number of issues.

Subsection (d): The default (used if a manufacturer fails to designate parts in categories) is that all parts are treated under the highest level of criticality. Under this provisions, all of these uncategorized parts would be treated to the same level of documentation and scrutiny as if they were life-limited parts with the highest level of criticality.

Inaction by design approval holders is a serious concern, because the precedent set by the FAA's commercial parts rule has shown that design approval holders may ignore an opportunity to designate parts (for the reasons stated elsewhere in our comments).



This would simply not be appropriate for low-criticality parts like most expendable, and it would stymie distribution efforts for existing expendables (already in inventories) that do not currently bear the level of documentation anticipated for high-criticality parts.

This clause punishes the entire industry - with a special punishment for companies that currently hold inventory - for the inaction of a manufacturer. A distributor that accepted inventory with C of Cs based on industry norms and EASA regulations would be punished if those same parts defaulted to CL1 and needed EASA Form One, because the parts would not have that form (because they were produced before the rule change) and there would be no mechanism for obtaining such a Form One for the existing inventory. This could render otherwise safe parts valueless, based solely on a change in paperwork designations.

response **Refer to Section 1**

comment 406 comment by: DGAC France

Criticality levels for new parts and appliances to be installed during maintenance. This paragraph propose 4 class of parts. It is quite difficult to differentiate the class between them and to affect a particular class to each particular part. The proposal should only define two class of parts, one which request form 1 and second class which is not linked to any potential safety risk. This last class could be limited in short term to commercial items as for example markings / labels, wall magazine rack, curtains, mirror, toilet seat, coat doors, torch holder, cup holder, coat rack

response **Refer to Section 1**

comment 411 comment by: PPL/IR Europe

The qualitative nature of the language used ("distress", "discomfort", "large", "significant", "slight") is likely to lead to inconsistency among DAHs. These qualifiers should of course be consistent with equivalent concepts in 23.1309 etc.

It is important that clear and detailed examples are given in guidance material. In the absence of such clarity, the industry will automatically assume a lower criticality level, if not the lowest - which would reduce or negate the intended value of this NPA.

response **Refer to Section 1**

comment 421 comment by: MARPA

The proposed CL classifications are vague and are subject to varying and disparate interpretations. For instance, the CLI(i) and CLII(i) ask the individual interpreting the classifications to distinguish between a "large reduction" and a "significant reduction" in functional capabilities or safety margin. The words "large" and "significant" can reasonably be interpreted by different persons as having varying degrees of importance or weight.



For instance, one definition (courtesy of Merriam-Webster) of “large” is “exceeding most other things of like kind especially in quantity or size.” A definition of “significant” is “of a noticeably or measurably large amount.” In such a context, it is difficult to determine which word carries greater importance or weight.

Such vagueness is problematic.

Similarly, the CLs ask the individual interpreting the categories to distinguish between “discomfort” and “distress.” As with the terms “large” and “significant,” these terms are vague and could be interpreted differently by different persons. Such vagueness and ambiguity is not desirable for regulations, which need to be predictable and consistently interpreted by both regulators and the regulated public.

Fortunately, EASA has already established within existing regulations and guidance appropriate Failure Condition Classifications that are defined and understood.

Those existing Failure Condition Classifications could be applied to CLI through CLIV as follows:

- (1) CL I for parts and appliances whose failure would:
 - (i) be classified as Hazardous or Catastrophic under CS-23, CS-25, CS-27, or CS-29
 - (ii) be classified as Hazardous Engine Effects under CS-E
- (2) CL II for parts and appliances other than those assigned CL I, whose failure would:
 - (i) be classified as Major under CS-23, CS-25, CS-27, or CS-29
 - (ii) be classified as Major Engine Effects under CS-E
- (3) CL III for parts and appliances other than those assigned CL II, whose failure would:
 - (i) be classified as Minor under CS-23, CS-25, CS-27, or CS-29
 - (ii) be classified as Minor Engine Effects under CS-E
- (4) CL IV for parts and appliances other than those assigned CL III, II or I.

Examples of Failure Conditions can be found in the following AMCs

AMC 25.1309 Paragraph 7

(1) No Safety Effect; (2) Minor; (3) Major; (4) Hazardous; and (5) Catastrophic.

AMC E.510 Paragraph 2

(d) Hazardous Engine Effects; (e) Major Engine Effects; and (f) Minor Engine Effects.

Using the existing failure condition classifications would significantly reduce the potential of inconsistent classification arising from vague and ambiguous language as currently proposed.

response **Refer to Section 1**

comment 422

comment by: *Business Aviation/AMO*

Criticality Levels

-Definition does not include the maintenance of a/c component or appliance :

- complexity of task
- system design (redundancy, reliability, identified design flaws ...)



- risk of error (and resulting lessons-learned of DAH/TCH or maintenance organisation)

risks associated to maintenance should be taken into account ...

-In case of a component demonstrating insufficient reliability or immediate safety issues (e.g. resulting in safety events), CL definition should be reviewed by DAH/TCH and/or EASA. This should be included in the PAD/AD process with EASA ...

Reporting such events should be added into reportable safety occurrences ... for AMOs (145.A.60).

-Proposed CL I and CL II may include CDCCL / EWIS components, PSE-related structural parts, LLPs ...

-Proposed CL III not consistent for flight crew procedures : use of emergency procedures will likely induce a higher workload and other HF factors ... proposal :

CL II (iii) : use of emergency procedures

CL III (iii) : use of abnormal / occasional procedures

-Definition expected with respect to "significant" reduction or increase ...

-CL complexity : limitation to 3 levels may be considered (CL I large impacts, CL II significant impacts, CL III low impacts / cabin appliances ...)

-Significant cost impact of CL system : additional PAH/TCH design engineering resources needed to define CL in design/maintenance data (e.g. IPC/IPL), adapted set of rules may apply for ELA aircraft manufacturers

Risk : additional complexity in Type Certification process, additional delay in European a/c type (or version) certification with adverse competitive position on the worldwide market

response **Refer to Section 1**

comment 434

comment by: ARSA

ARSA suggests that new 21.A.308 be revised by substituting the underlined sentence for the verbiage in the NPA.:

21.A.308 Critical new parts and appliances to be installed during maintenance

(a) The applicant for, and the holder of, a design approval of a product, a change or a repair, the holder of a standard change or a standard repair and the holder of an ETSO article authorization (hereinafter jointly referred as 'design approval holder') may, for the parts and appliances that it has designed or has identified in the design and that are not ETSO articles nor products, determine which parts are critical. For purposes of this section, "critical part" means a part identified by the design approval holder (DAH) during the product certification process or otherwise by the Authority for the State of Design (SoD). Typically, such components include parts for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section or certification maintenance requirements of the manufacturer's maintenance manual or Instructions for Continued Airworthiness.



response

Refer to Section 1

comment

442

comment by: *Safran Cabin Germany GmbH DOA 21J.067*

The criticality levels (CLs) assigned to parts and appliances as per 21.A.308(a) should be limited to two CLs, i.e. with and without showing of compliance with detailed airworthiness specifications, to meet Article 5 of the Basic Regulations.

21.A.308(c) introduces an additional burden on Design Approval Holders to prepare, issue and maintain a list of CLs to each part and appliance. In case of some thousand parts comprising cabin monuments there is no rationale to accept this additional burden to just preserve the existing safety level.

21.A.308(d) should be limited to cases where the Design Approval Holder is no more available and basically the final decision should be made by the Design Approval Holder and not EASA.

response

Refer to Section 1

comment

459

comment by: *Safran Aircraft Engines*

Section 3, § 3.1.1, page 9/32

This paragraph, that provides the possibility to the DAH to lower the CL, should allow also to higher the CL when necessary (e.g. need for fleet tracking behaviours).

We recommend to check the consistency with similar FAA requirements AC 43-18 that define only 3 classifications.

Proposed text:

'21.A.308 Criticality levels for new parts and appliances to be installed during maintenance

(b) Notwithstanding point (a), the design holder referred to in (a) may decide to assign a lower **or higher** CL to a part or appliance than the CL that would correspond to the part or appliance under (a).

response

Refer to Section 1**New 21.A.309**

p. 9

comment

5

comment by: *Atol Avion*

On the 21.A.309 table is written: "...with assigned CL I (.ie., lowest CL)" and "...with assigned CL IV (.ie., highest CL)". Shouldn't these be vice versa regarding the criticality?

response

Refer to Section 1

comment

9

comment by: *Prof. Filippo Tomasello*

response	Possibly CL I would be the highest criticality level and IV the lowest non vice-versa as published in the table in the NPA Refer to Section 1
comment	10 comment by: Prof. Filippo Tomasello The Certificate of Conformity should be in compliance with EU Regulation 765/2008 on market surveillance and associated Decision 768/2008 indeed on conformity assessment procedures. This principle is already recognised for UAS, by EC Communication 613/2015 and Agency's NPA 2017/05(A).
response	Refer to Section 1
comment	11 comment by: Prof. Filippo Tomasello Even for CLIII the CoC should be compliant with one of the possibilities in Regulation 765/2008 and Decision 768/2008
response	Refer to Section 1
comment	12 comment by: Prof. Filippo Tomasello It is understood that the effect of a failure or malfunction of a part or appliance in CL IV would be negligible and therefore even the Regulation on market surveillance would not apply. Should this interpretation be correct, then the text could be more explicit: "Community harmonisation legislation for market surveillance does not apply to CL IV parts and appliances. Any release document acceptable for parts with assigned CL III; or at least the documentation accompanying the part identifying the part and the manufacturer."
response	Refer to Section 1
comment	39 comment by: Philip Young 1.The Table states that CL I is the lowest CL, yet these items are to the highest standard. Page 20, 4th paragraph "high manufacturing standards". Higher, highest, lower, lowest, are quoted throughout the document. The Highest specification standard should be the highest CL. We know from Human Factors training, that this NPA document creates an unnecessary safety ambiguity. 2. The Table states CL IV "any release document acceptable" - up until now, an acceptable document is an EASA Form 1. What is a definition of "Acceptable" in this context?
response	Refer to Section 1
comment	60 comment by: AIR FRANCE / ZYLAWSKI Christine

21.A.309 "Manufacturing standards and release requirements for new parts and appliances to be installed during maintenance" :

- It seems, with so many CL which only one necessitate an EASA Form 1, that a lot of parts would be produced without an EASA Form 1, meaning without a POA. It seems that it is to alleviate the burden on manufacturers. It has to be demonstrated that the aviation industry standards (EN 9100 and so) or the manufacturing industry standards (EN 9001 and so) can ensure the same level of quality than manufacturing under a POA. By which means do we demonstrate that a part released under a CoC adheres to all aircraft manufacturing requirements? Are the manufacturing standards (and related controls) altered in terms of quality of manufacturing, how do we demonstrate that this process has no consequence in terms of airworthiness, reliability, flame resistance, flash resistance, fire resistance, load factors, material characteristics etc.

- The reading of CoC contents seems more complex than before with the different categories of CL whereas for the CL 4 the traceability is very low (no need of CoC). The incoming reception will be more complex and more errors could be done by logistic staff.

- Are the PMA concerned by the new definitions? A PMA with FAA Form 8130-3 "This is not a critical part" will not need a release certificate, but only a CoC (CL II or III).

- There is a transfer of responsibility between the Authority which delivers the POA approval and the design organizations which has to identify the manufacturer (CL II). The workload for Design Organization will increase.

response

Refer to Section 1

comment

109

comment by: FNAM

ISSUE

In 2017, FNAM and GIPAG called for more privileges for PART-145 General Aviation organizations than independent PART-66 staff through a letter addressed to Patrick KY. One of the required privileges is:

« An Approved Maintenance Organization shall be authorized to establish an EASA form 1 for a component for which are available:

- 8130-3 form (FAA); or
- 24-0078 TCCA; or
- TCCA non-dual form

(Limited to non-critical components and within the scope of work of the approval of Approved Maintenance Organization)»

NPA 2017-19 answers approximatively to FNAM and GIPAG's request but FNAM and GIPAG's welcome EASA's efforts to provide more flexibility for airworthiness requirements. A clarification is needed for EASA Form 1 equivalence. Indeed, the current AMC 145.a.42(a) describes equivalent documents to an EASA Form 1:

- Possibility to take benefit of bilateral agreement (no additional precision)



- Possibility to transform previous JAA certificates (list of approved JAA certificates)

US equivalents are explained in a FAQ on EASA's website. It is quite difficult to have the entire list of equivalent for other current bilateral agreements. A list of equivalent of EASA Form 1 should be clearly provided by EASA. Even if AMC 145.A.42(a) is brief, since it is the only regulatory text which provides information on equivalent documents for EASA Form 1, it should not be suppressed.

PROPOSAL
Provide in GM a website where bilateral agreements are updated and, therefore, provide the list of the current equivalent for an EASA Form 1.
Keep the AMC 145.A.42(a)

response **Refer to Section 1**

comment **114** comment by: ENAC

1) Not agree with the proposal that parts and appliances which have been classified by DAH as CL II may be manufactured by organisations not approved under POA, because of the possible consequences on safety margin and/or functional capabilities.

2) For part and appliances included in the classification CL IV, the documentation accompanying the part should refer to a standard set of minimum information. The phrase or "at least only the documentation accompanying the part identifying the part and the manufacturer" seems not adequate for traceability purposes.

response **Refer to Section 1**

comment **123** comment by: Luftfahrt-Bundesamt

Proposal:
CL I full POA,
CL II reduced oversight but still by NAA (less formal requirements, extended duration etc.).

response **Refer to Section 1**

comment **134** comment by: British Airways Engineering

Lower higher anomaly!
Please consider CL I as the highest and CL IV as the lowest. As the highest risk, the highest cost and the highest requirement standard is with CL I parts, we think it would be much better to call CL I as "highest" and CL IV as "lowest". This NPA is



	<p>contrary to the everyday logic of high and low and would cause many confusion if left as it is.</p> <p>It's rather a question than a comment: Is it necessary to have 4 different CL levels? May be less level will cause less confusion. We think for us a 3 level CL system can be sufficient. However if general aviation requires the 4 level CL system, then we can accept it as well.</p>
response	Refer to Section 1
comment	<p>154 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i></p> <p>Was the affect of this NPA approach assessed against the current BASA with US, Canada and Brazil?</p>
response	Refer to Section 1
comment	<p>178 comment by: <i>EHA</i></p> <p>21.A2.309 table, for CL III parts, does a certificate have to be issued? What about a statement of conformity on the packing slip? This appears to be backed by AMC 21.A.309, point 2 (Page 16) where it only refers to C of C for CL II</p>
response	Refer to Section 1
comment	<p>184 comment by: <i>CAA CZ</i></p> <p>21.A.309 (and also: 21.A.308, GM 21.A.91, Appendix A to GM 21.A.91, GM 21.A.308(b)):</p> <p>We think that the new term Criticality Level (CL) should express importance of part or appliance with respect to proper function of a final certified product. Thus, we find a bit confusing fact that most important parts in terms of essentiality, functionality, quality, etc. for which the Form 1 is to be issued are marked as parts with the lowest CL. And vice versa, parts and appliances which are not critical for safe operation of final product are presented as parts and appliances with assigned highest CL. In our opinion this classification (lowest/highest) should be reverse. Some similarity with minor/major/hazardous/catastrophic classification of failure conditions as defined in the AC 23.1309 can be seen here.</p>
response	Refer to Section 1
comment	<p>195 comment by: <i>Airlines for Europe (A4E)</i></p> <p>NPA Text subject to comments (abbreviated as applicable):</p> <p>New parts and appliances to be installed during maintenance shall be manufactured and released as follows, depending on the criticality level (CL) assigned in accordance with point 21.A.308:</p> <p>(Table CL vs manufacturing standard and release requirement follows)</p>



Comment:

It seems, with so many CL which only one necessitate an EASA Form 1, that a lot of parts would be produced without an EASA Form 1, meaning without a POA. It seems that it is to alleviate the burden on manufacturers. It has to be demonstrated that the aviation industry standards (EN 9100 and so) or the manufacturing industry standards (EN 9001 and so) can ensure the same level of quality than manufacturing under a POA.

By which means do we demonstrate that a part released under a CoC adheres to all aircraft manufacturing requirements? How do we ensure that manufacturing standards (and related controls) will not be altered in terms of quality of manufacturing ? (how do we demonstrate that this process has no consequence in terms of reliability, flame/flash/fire resistance , load factors, material characteristics etc).

- The reading of CoC contents seems more complex than before with the different categories of CL whereas for the CL 4 the traceability is very low (no need of CoC). The incoming reception will be more complex and more errors could be done by logistic staff.

- Are the PMA concerned by the new definitions? A PMA with FAA Form 8130-3 "This is not a critical part" will not need a release certificate, but only a CoC (CL II or III).

- There is a transfer of responsibility between the Authority which delivers the POA approval and the design organizations which has to identify the manufacturer (CL II). The workload for Design Organization will increase.

- "A CoC conforming to EN 10204 or ATA 106 is considered adequate to release parts and appliances that have been assigned CL II". What about CoC for CL III parts ?

response **Refer to Section 1**

comment 217

comment by: *Lee Carslake*

In regard to 21.A.308 Point (2) CL2. It is my opinion that any parts whose failure would cause a significant reduction in functional capability or safety margin should continue to only be accepted on EASA Form 1 or equivalent.

Justification: The NPA later assumes that a part within CL 2 can be manufactured by a non-regulated organisation holding an ISO 9001 accreditation standard. This is a weakness in the methodology as ISO 9001 differs considerably from the Aerospace manufacturing standard AS9100 which provides for more restrictive practices. Also whilst not having any data to support, a considerable amount of design data is available in the public domain and there is a potential opportunity for this to be exploited with the introduction of bogus parts.

Would suggest some clarification/link to system redundancy criteria listed in 21.A.308 as a result.

response **Refer to Section 1**

comment 228

comment by: *Alexander KOBZAR*



We are proposing to amend manufacturing standards and release requirements for CL II and CL III in the table included in 21.A.309. The term ‘quality management system requirements recognized by aviation/manufacturing industry’ from our point of view is not sufficient to satisfactorily ensure appropriate control of manufacturing quality of parts. We believe that the availability of ‘evidence of compliance with QMS requirements’ must be acceptable only in the case if originated by appropriate (or recognized at the appropriate level) Certification Body (i.e. Bureau Veritas, TUV, etc.) who have proved their effective certification activity. In the real world there are a lot of small organisations exists, who offers certification services for QMS while such companies have no appropriate background in the manufacturing field, nor in the Quality Management Systems field. This is especially critical for Non-EU countries where there is no appropriate oversight from authority’s side for such activity. Taking into consideration the international nature of design and manufacturing activities it is expected that there will appear a lot of manufacturers with ‘paper QMS’ verified by ‘paper certification bodies’. DAH’s, AMO’s and operators are not expected to deal with such a problem. As a result, it could lead to appearance of parts of inappropriate quality with compromised compliance with design data. From our point of view EASA should appoint acceptable certification bodies for the standards, or acceptable accreditation bodies who authorizes another certification bodies.

response **Refer to Section 1**

comment 245 comment by: Safran Landing Systems

The newly proposed Part 21 paragraph permits Maintenance Organisation to produce parts and deliver them according to their class.
Safran Landing Systems consider that it is not clear the link with the 21.A.3A(b). As an example, in case of a problem during manufacturing, how will the Maintenance Organisation act with regard to the 21.A.3A(b)?

response **Refer to Section 1**

comment 263 comment by: AIRBUS

- 1. PARAGRAPH / SECTION :**
NPA 2017-19, page 9/32, point 21.A.309
- 2. PROPOSED TEXT / COMMENT :**
It is proposed to delete this point.
- 3. RATIONALE / REASON :**
The text should be proposed as “soft laws”, i.e. CS/AMC/GM rather than requirements in the Implementing Rules.

Notes:

- In point 21.A.309 table, the manufacturing standards and release requirements for CL II and CL III call for a copy of *evidence* that the “manufacturing source” meets a quality management system standard recognized.
What is such “evidence” ? Does it mean that the quality management system valid certificate as well as the defined scope of such certification shall be provided with the CoC?



response	<p>What is the definition of the term ‘manufacturing source’? Does it refer to the design data, the material, the fabrication method, or the actual/subcontracted manufacturer?</p> <ul style="list-style-type: none"> In the table, there is no reference to part number for CL III. The point 21.A.804 requires that CL I, II, and III be marked with a part number. <p>Refer to Section 1</p>
comment	<p>299 comment by: Safran Nacelles</p> <p><i>With regards to New point 21.A.309:</i> A certificate of conformity is required for CL II & CL III parts. The CL IV parts, even a CofC is not required for release, have to conform to a type design. Acting outside POA for CL II to CL IV parts, how can it be ensured that type design data is fully available for the manufacturing organisation? Producing CL II to CL IV parts based on incomplete or outdated type design data will result in release of multiple parts not conform to the certified type design, which may adversely affect the safety of flight. “A kind of DO/PO agreement (even outside POA)” could be necessary to ensure conformity to type design.</p>
response	<p>Refer to Section 1</p>
comment	<p>300 comment by: Safran Nacelles</p> <p><i>Other comment pertaining to New point 21.A.309:</i> A third-party company could deliver parts without obligation to report manufacturing deviations on parts already delivered to service. Even with reporting, the TCH or OEM may have to support the continued airworthiness potentially without access to comprehensive data (nature of the event, population...) and without commercial agreement. This could be mitigated by “A kind of DO/PO agreement (even outside POA)” with TCH/OEM to ensure a minimum level of reporting and mutual agreement</p>
response	<p>Refer to Section 1</p>
comment	<p>339 comment by: Leonardo Helicopters</p> <p>The use of the wording "lowest CL" and "highest CL" is misleading as it doesn't reflect the intended meaning. It's true that I is lower than IV but it's more important, instead "lower" can be intended as "less important".</p>
response	<p>Refer to Section 1</p>



comment	<p>340</p> <p style="text-align: right;">comment by: <i>Leonardo Helicopters</i></p> <p>In the table, second CL:</p> <ol style="list-style-type: none"> 1. It's not true that a manufacturer is identified in the design data, in many case the manufacturer is a subcontractor of the PO and it is identified by the PO. It is strongly suggested to delete "identified in the design data". 2. What is the meaning of "stating conformity with the identified design part number"? Does it mean "conformity with the design data" or "identifying the part"? Please replace as appropriate. 3. What is the meaning of "... and the manufacturing source ..."? The the manufacturing source shall be identified in the CoC, for example in case of CoC issued by a distributor? In case of part or appliance provided by a distributor do we need a CoC both from the distributor and from the manufacturing source? <p>In the table, CL IV:</p> <ol style="list-style-type: none"> 1. To align the wording with the rest of the table, the word "manufacturer" should be replaced with "manufacturer source".
response	<p>Refer to Section 1</p>

comment	<p>363</p> <p style="text-align: right;">comment by: <i>IATA</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Existing Text</th> <th style="text-align: center;">Comment / Proposed Text</th> <th style="text-align: center;">Justification</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">21.A.309 and any other section of the proposed text including the wording "highest CL" or "lowest CL"</td> <td style="vertical-align: top;">The NPA should incorporate a note in referring to the clear distinction between the criticality of the part and the CL number assigned.</td> <td style="vertical-align: top;">The present wording may potentially create confusion being counter intuitive: the most critical parts are assigned the lowest CL and vice versa.</td> </tr> </tbody> </table>	Existing Text	Comment / Proposed Text	Justification	21.A.309 and any other section of the proposed text including the wording "highest CL" or "lowest CL"	The NPA should incorporate a note in referring to the clear distinction between the criticality of the part and the CL number assigned.	The present wording may potentially create confusion being counter intuitive: the most critical parts are assigned the lowest CL and vice versa.
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21.A.309 ... Part/appliance...CLI (i.e., lowest CL)”	21.A.309 ... Part/appliance...CLI (i.e., highest criticality, thus lowest CL)”	Avoid perception confusion of lowest criticality level as lowest criticality (it is quite the opposite)
response	Refer to Section 1	

comment	365	comment by: IATA						
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response	Refer to Section 1							

comment	372 ❖	comment by: HEICO Aerospace
<p>HEICO Comment 1 – Criticality Level - Various Locations Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.</p>		
<p>Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.” As appropriate, replace “Critical” with “Safety Sensitive.”</p>		



Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion. Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

comment 376 comment by: *Embraer S.A.*

The Embraer believes that the use of four criticality levels is not necessary and it differs from the current practice of the industry. More importantly, there is no significant difference between the documentation or certification required for CL II and III, since the additional information required for CL II described in table of the 21.A.309 is the information already present in a standard Certificate of Conformity, which is still required for CL III.

response **Refer to Section 1**

comment 380 comment by: *HEICO Aerospace*

HEICO Comment 3 – CL Traceability Requirements – Page 9
 Comment: The CL specific proposed Manufacturing standards and release requirements seem to be too relaxed for aerospace components. The current proposed manufacturing standards and release requirements for CL IV parts could be satisfied by a slip of paper that states the P/N and the manufacturer’s name. Furthermore, as written, a CL IV part could be non-conforming to the design and still be released under the proposed requirements.

Suggested Resolutions:

For CL III Parts and Appliances revise the Manufacturing standards and release requirements to read:

“Any release document acceptable for parts with assigned CL II; or the part is accompanied by means of a CofC, stating conformity to the identified design Part Number, as well as copy of evidence that the manufacturing source meets a quality management system standard recognised by the aviation industry as suitable for manufacturing. ~~the manufacturing industry.~~”

For CL IV Parts and Appliances revise the Manufacturing standards and release requirements to read:

“Any release document acceptable for parts with assigned CL III; or the part is accompanied by means of a CofC as well as copy of evidence that the manufacturing source meets a quality management system standard recognised by the manufacturing industry. ~~at least the documentation accompanying the part identifying the part and the manufacturer.~~”



	<p>Justification:</p> <p>CL III parts, parts that could cause slight degradation of safety margins and/or physical discomfort to the passengers, should at least have a CoC stating conformity to the P/N identified in the product design. Manufactures of these articles should <u>at least</u> have a quality management system that meets the requirements of an aviation industry standard. Ideally, the quality management system would also be audited by an independent oversight organization.</p> <p>CL IV parts, should <u>at least</u> have a CoC and have a quality management system that meets some industry standard. If the current language is accepted, non-conforming CL IV parts and appliances could be released into the fleet.</p>
response	Refer to Section 1
comment	<p>407 comment by: <i>DGAC France</i></p> <p><i>Manufacturing standards and release requirements for new parts and appliances to be installed during maintenance. This paragraph propose 4 different cases of release documents. The proposal (excluding the standard parts) should be limited to 2 cases : Form 1 or equivalent and CofC from organisation having a recognized quality system.</i></p>
response	Refer to Section 1
comment	<p>412 comment by: <i>PPL/IR Europe</i></p> <p>The use of "highest" and "lowest" for criticality levels is counterintuitive. The expression "highest criticality" is synonymous with "most critical". This should not be associated with the "lowest criticality level" (CL I).</p> <p>Fixing this issue might seem onerous after the NPA, but the Agency owes clarity to stakeholders who will use these rules.</p> <p>(Please note that in the remainder of our comments, we adopt the convention in the NPA, that CL I is the lowest and CL IV is the highest criticality level.)</p> <p>Proposal Relabel the criticality levels, either reversing the numbers or using letters, and make the corresponding adjustments throughout the text.</p>
response	Refer to Section 1
comment	<p>423 comment by: <i>MARPA</i></p> <p>The manufacturing standards and corresponding release documentation requirements appear to greatly relax the current standards that greatly contribute to the aerospace industry's excellent safety record. The proposed manufacturing standards (such as they are) and release requirements for CL IV parts could be satisfied by nothing more than a piece of paper with a part number or nomenclature</p>

and a manufacturer name. As drafted, a CL IV part could fail to conform to the design and still be released under the proposed requirements, because there is not even a standard to which the article is held.

The entire approach to manufacturing standards and corresponding release documentation seems backwards, and appears to prioritize preservation and clarification of documentation over maintaining manufacturing and production quality.

Part of the rationale for the NPA reads as follows:

"Points 21.A.309 and M.A.502 contain the requirements for the release of parts, respectively new and used, to be used during maintenance. The proposed point 21.A.309 allows the manufacturer of the new parts, for which the DAH has assigned CL II, III or IV (see proposed point 21.A.308), to manufacture not under the production system defined in Part 21, but instead according to different manufacturing standards, based on the part's assigned CL. Thanks to this approach, the DAH, by using the classification in point 21.A.308, is indirectly deciding which parts have to be manufactured under a POA and which parts do not need such high manufacturing standards and the consequential CA oversight, as it can be the case for many commercial parts, for instance. This would provide industry with the flexibility it needs for installing certain parts for which an EASA Form 1 is not appropriate." (emphasis added).

The concern here appears to be whether or not a Form 1 would be appropriate for certain parts, and that because the CA may lack the resources to provide oversight, the DAH should be permitted to make determinations as to whether a part should be manufactured under a production approval (under part 21) or whether any person, qualified or not, can simply start producing parts.

While industry-accepted standards play an important role in aviation safety, notably with respect to standard parts, the key to aviation's excellent safety record is tight, well-regulated design and production controls. Removing from the oversight of CAs the production quality systems of manufacturers of aerospace articles in the name of ensuring paperwork uniformity is completely backwards, and threatens safety in the name of fealty to bureaucracy. Rather than reducing the number of parts that require an EASA Form 1 by reducing the manufacturing standards associated with those parts, it would be more appropriate, and more consistent with promoting and improving safety, to retain strict manufacturing requirements and broaden the eligibility for the issuance of Form 1s. We must prioritize safety and sound manufacturing practices over mere paperwork policy and procedure.

We thus recommend that EASA revise and enhance the manufacturing standards and release requirements as follows:

For CLIII Parts and Appliances, revise the Manufacturing standards and release requirements to read:

"Any release document acceptable for parts with assigned CL II; or the part is accompanied by means of a CofC, *stating conformity to the identified design Part Number*, as well as copy of evidence that the manufacturing source meets a quality



management system standard recognised by *the aviation industry as suitable for manufacturing. the manufacturing industry.*"

CL III parts, which could cause slight degradation of safety margins and/or physical discomfort to the passengers, should at least have a CoC stating conformity to the part number identified in the product design (or equivalent, such as a PMA). Manufactures of these articles should at least have a quality management system that meets the requirements of an aviation industry standard.

For CL IV Parts and Appliances revise the Manufacturing standards and release requirements to read:

"Any release document acceptable for parts with assigned CL III; or the part is accompanied by means of a CofC as well as copy of evidence that the manufacturing source meets a quality management system standard recognised by the manufacturing industry. at least the documentation accompanying the part identifying the part and the manufacturer.

CL IV parts should at least require a CoC and have a quality management system that meets a generally accepted industry standard. Under the current language, any part, whether conforming to design or not, could be released into the supply chain and be installed on a passenger-carrying aircraft.

These changes are consistent with a mission of safety and ensure that parts are manufactured in conformance with accepted standards, thus preventing unqualified manufacturers (perhaps those manufacturers who would, or even have, failed to obtain production certificates or approvals) from producing and releasing substandard parts into the supply chain.

Further, the removal of CLII-CLIV parts from CAA oversight appears to be an abrogation of the state duties under ICAO norms. E.g. Chicago Convention, Annex 8, Part II, section 2.2.1.

We would expect greater rigor in any proposal to alter EASA's method of compliance to the ICAO standards. In particular, there appears to be no evidentiary basis for the conclusion that production approval standards need to be altered (not to say reduced), nor is there any discussion supporting a conclusion that the alteration achieves an equivalent level of safety.

The proposal also fails to offer CAAs any alternative practices in order to allow them to ensure conformity for CLII-CLIV parts. This is, once again, an apparent abrogation of state duties under the Chicago Convention.

States also have a duty to set clear standards for compliance. The ability of the DAH to assign CL level and thereby establish the production approval requirements for a particular part or appliance means that the design approval holder is effectively setting the regulatory compliance standards for other parties. This seems to be an abrogation of the state's obligation to regulate parties, not to mention a fact pattern that is primed for abuse.



Finally, there appears to be a dangerous possibility of misuse of this proposal for competitive gain at the expense of safety. Design approval holders have the authority to assign higher CL levels to parts. This means that a DAH could assign CL I to a standard part, or other very low-level non-safety-sensitive part. This could happen even if the part met the criteria for CL IV. This might effectively put the standard part producer out of business, thus shifting the power to produce that part to the PAH from the standard part producer. It seems unwise to create a mechanism that permits this sort of market manipulation and potential for monopolization.

For these reasons, we would advise dropping proposed changes to production approval standards until these issues could be addressed in a robust manner, and until the EU's compliance with Annex 8 of the Chicago Convention can be considered.

response **Refer to Section 1**

comment 431 comment by: *Business Aviation/AMO*

Manufacturing Standards

-Many components / sub-components manufactured by industry level I manufacturers which could fall into CLII /CLIII categories are released without FAA Form 8130-3 or TCCA Form One and installed on US/Canada registry aircraft with CC issued by the manufacturer.

Wider EASA/FAA and Canada recognition is needed in that respect, in so far as this CC-based certification system did not result in adverse safety events overseas.

Option 1 to this NPA is therefore highly desirable.

-Position with respect to standard parts should be reviewed : several safety events / incidents in the aerospace industry found their root cause in the failure / wrong installation of o'rings or seals ... such items could fall into CLII if not I.

-CL III / CL IV : especially needed as this deals with most cabin equipment (tables, pax seats, sinks, water boilers, trash compactors, sofas, IFE items...) and other options (e.g. tail/underbelly cameras) installed on business jets or VIP aircraft.

Many cabin furniture / equipment manufacturers involved have a QMS, but no Civil Aviation a/c or equipment production approval whatsoever. They usually produce several families of systems for the "high-end" automotive industry, installed in other vehicles than aircraft. Most have a medium/small company structure (e.g. craftsmen for leather upholstery).

response **Refer to Section 1**

comment 451 comment by: *Safran Cabin Germany GmbH DOA 21J.067*

CL III and IV will introduce liability issues adversely impacting safety if there is no appropriate CoC, as specified in CL II, issued by the manufacturer ensuring that new manufactured parts and appliances conform with the applicable type design data specified by the Design Approval Holder.

response **Refer to Section 1**



comment	460	comment by: <i>Safran Aircraft Engines</i>
	<p>Section 3, § 3.1.1, page 9/32</p> <p>The proposed § 21.A.309 states that for parts and appliances with assigned CL II, no airworthiness surveillance is required and a company's quality management system standard with Certificate of Conformity is suitable.</p> <p>Criticality Level CL II would cause "significant reduction in functional capabilities or safety margin, or physical distress to passengers possibly including injuries, or physical discomfort to or significant increase in workload for the flight crew", which is corresponding to the Major safety classification as per AMC 25.1309 with a risk of uncontrolled common modes.</p> <p>We recommend to keep the Airworthiness Surveillance to such parts and appliances.</p> <p>Proposed text: '21.A.309 Manufacturing standards and release requirements for new parts and appliances to be installed during maintenance <u>Parts and appliances with assigned CL II :</u> <u>EASA Form 1 or equivalent, unless the Agency has assigned the CL and recognises another release document as acceptable</u></p>	
response	<i>Refer to Section 1</i>	

comment	463	comment by: <i>Swiss Aviation Maintenance Association SAMA</i>
	<p>The SAMA Members are very critical whether the DAH are going to review their documentation of General and Business Aviation Aircraft etc. accordingly to include the Classes I though IV, this especially for older aircraft still in use in large numbers.</p> <p>Proposal: We ask whether it could be possible to have an Approved Maintenance Organisation (Part-145) to be able to define the Classes III and IV parts with an own MOE process approved by the Competent Authority based on the NPA proposed AMC & GM material.</p>	
response	<i>Refer to Section 1</i>	

21.A.804

p. 10

comment	70	comment by: <i>LHT DO</i>
	<p>Please assure consistency with the EPA marking. If no EPA marking is necessary the 21/J or the origin of the spec should be indicated on the part to ensure the part can be tracked to its originator. Otherwise we would prefer the complete deletion of the EPA marking requirement if you do not find it necessary.</p>	
response	<i>Refer to Section 1</i>	
comment	117	comment by: <i>ENAC</i>



response	for point 21.A.804 (a) 3: in accordance with other comments provided in other items, include CL II for EPA marking
	Refer to Section 1
comment	155 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> To request only CL I parts to be marked with EPA will facilitate a situation where parts from TC Holder design and changed parts under (other) DOA can't be identified in-service anymore. Is such affect seen as beneficial?
response	Refer to Section 1
comment	197 comment by: <i>Airlines for Europe (A4E)</i> Paragraph/Headline: 21.A.804(a),and 3 Rationale (request for stakeholder comment on page 20) NPA Text subject to comments (abbreviated as aplicable): (a) Each part or appliance with assigned criticality level (CL) I, II or III, as defined in point 21.A.308, shall be marked permanently and legibly with: 1. a name, trademark, or symbol identifying the manufacturer in a manner identified by the applicable design data; and 2. the part number, as defined in the applicable design data; and 3. the letters EPA for parts or appliances with assigned CL I, as defined in point 21.A.308, produced in accordance with approved design data not belonging to the type-certificate holder of the related product, except for ETSO articles. Comment: In the proposed amendment to par. 21.A.804(a), part marking would no longer be required for CL IV parts and appliances, only for CL I through CL III parts and appliances. On the other hand, proposed amendment to M.A.501(a) requires that a component shall only be installed on an aircraft or on another component when it is in a satisfactory condition, meets the applicable release requirements defined in point 21.A.309 of Annex I (Part 21) to Regulation (EU) No 748/2012 or M.A.502, and is marked in accordance with Subpart Q. It is evident that the proposed amendment will not require marking in accordance with subpart Q for CL IV parts , but a certain form of marking remains necessary. Proposed amendment to M.A.501 should address this issue. If part is unmarked, how does EASA envisage the verification of an unmarked part that it meets the applicable release requirements, as correlation of a unmarked part (CL IV) with the release document is not possible? Also, traceability of the part can not be established when the part is not marked.
response	Refer to Section 1
comment	243 comment by: <i>Safran Landing Systems</i>

	21.804 point : EPA marking is limited to class1 parts. Identification of the producer of the part will be more difficult for other parts
response	Refer to Section 1
comment	<p>264 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 10/32, point 21.A.804</p> <p>2. PROPOSED TEXT / COMMENT : It is proposed to amend this point to read: “21.A.804 Identification of parts and appliances (a) Each part or appliance with assigned criticality level (CL) I, II or III, as defined in point 21.A.308, shall be marked permanently and legibly with: [...] 3. the letters EPA for parts or appliances with assigned CL I, as defined in point 21.A.308, produced in accordance with approved design data not belonging to the type-certificate holder of the related product, except for ETSO articles and standard parts as defined in 21.A.303(c). (b) By way of derogation from point (a), if the Agency agrees that a part or appliance is too small or that it is otherwise impractical to mark a part or appliance with any of the information required by point (a), the authorised release document accompanying the part or appliance or its container shall include the information that could not be marked on the part or appliance.”</p> <p>3. RATIONALE / REASON : Airbus is of the opinion that there is no need to refer to the Criticality Levels in the paragraph (a) as reference to ‘design data’ is already included in items 1. to 3. of paragraph (a). Further, it could create confusion with point 21.A.805 ‘Identification of critical parts’ as one could expect that parts and appliances with the CL I be ‘critical parts’.</p>
response	Refer to Section 1
comment	<p>352 comment by: Jeff Conner</p> <p>The language proposed in 21.A.804(a)3. restricts the marking of the letters EPA to CL I parts only.</p> <p>GE Aviation has the following concerns with this proposal:</p> <p>(1) Read together with proposed language in 21.A.308, this language could be interpreted to mean that EASA will allow DAH's for EPA to simply adopt the same CL as the original type design part absent a separate analysis by the EPA holder.</p> <p>(2) The language proposed in 21.A.308 defines CL II parts/appliances as parts/appliances whose failure "would:</p> <ul style="list-style-type: none"> (i) cause a significant reduction in functional capabilities or safety margin, or (ii) cause physical distress to passengers possibly including injuries, or

(iii) cause physical discomfort to or significant increase in workload for the flight crew."

Parts whose failure would cause these types of problems that have been "produced in accordance with approved design data not belonging to the type-certificate holder of the related product" should continue to be marked with the letters EPA to assist EASA, other national aviation authorities, and other industry stakeholders in defining which DAH to engage should field issues with these parts arise.

(3) The language proposed in 21.A.308 defines CL III parts/appliances as parts/appliances whose failure "would:

(i) cause a slight reduction in functional capabilities or safety margin, or

(ii) cause physical discomfort to passengers, or

(iii) cause a slight increase in workload for the flight crew or require them to use emergency procedures.

Parts whose failure would cause these types of problems that have been "produced in accordance with approved design data not belonging to the type-certificate holder of the related product" should continue to be marked with the letters EPA to assist EASA, other national aviation authorities, and other industry stakeholders in defining which DAH to engage should field issues with these parts arise.

response **Refer to Section 1**

comment 355 comment by: *Rolls-Royce plc POA*
Engine parts will not be differentiated by this criteria.

response **Refer to Section 1**

comment 372 ❖ comment by: *HEICO Aerospace*

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of "Criticality Level" for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace "Criticality Level" with "Category Level."

As appropriate, replace "Critical" with "Safety Sensitive."

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a "Criticality Level" could add uncertainty to the classification of a part as "Critical or Non Critical." Changing the Levels to either "Category Level" will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less



confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

Proposed amendments to Part-M – M.A.401

p. 10

comment 156 comment by: *Rolls-Royce Deutschland / DOA Manager D. Stege*

This NPA proposes to change EU law in Part-21, Part-M, Part-145 in one go. What happens in case of partial endorsement?

response **Refer to Section 1**

comment 265 comment by: *AIRBUS*

1. PARAGRAPH / SECTION :

NPA 2017-19, page 10/32, point M.A.401

2. PROPOSED TEXT / COMMENT :

It is proposed to NOT amend the point M.A.401.

3. RATIONALE / REASON :

Airbus proposals include the addition to the instructions for continued airworthiness of the list of parts and appliances not requiring the issue of an EASA Form 1 and of the related manufacturing and release standards.

response **Refer to Section 1**

comment 372 ❖ comment by: *HEICO Aerospace*

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”

As appropriate, replace “Critical” with “Safety Sensitive.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less



	confusion if, when discussing the classification of parts, the classification is discussed as their "Safety Sensitivity" as opposed to their "Criticality."
response	Refer to Section 1
comment	<p>381 comment by: HEICO Aerospace</p> <p>HEICO Comment 4 – CL II Manufacturer Identification in Maintenance data – Page 10 Comment / Justification: CL II parts may be released by the manufacturer identified in the design data by means of a Certificate of Conformity (CofC). Since the design data (and therefore the manufacturer identified in the design data) is not typically published, the manufacturer identified in the design data has to be made available to interested parties for CL II parts/appliance. This will ensure that the person or organisation performing maintenance can assess whether the release requirement for the CL II parts/appliances are met.</p> <p>Suggested Resolution: 2 Places, add the following sub-bullet or include within the text of M.A.401 Maintenance data paragraph (b)3. and 145.A.45 Maintenance data paragraph (b)3.: "For CL II parts the manufacturer identified in the design data must also be identified."</p>
response	Refer to Section 1

M.A.501

p. 10-11

comment	<p>81 comment by: René Meier, Europe Air Sports</p> <p>M.A.501 Installation of components and standard parts, and use of raw and consumable material p 11/32 (e)</p> <p>Thank you for this provision.</p> <p>Rationale We support this as it is what the "lighter, better, simpler" rules for General Aviation should bring in future. However, we are deeply concerned that there appears to be no demonstrated interface between this measure and Part M-Light, the specific Airworthiness and Maintenance rule intended to be uniquely relevant to EASA ELA aircraft. We understand, and remaining frustrated, that Part-M Light is still in development pending a vote of the EASA Opinion. We are closely following the progress of "Part-M light" which is suffering years of delay, to the detriment of our members. We are seriously concerned the this measure, which we welcome in principle as useful to our community, is not properly integrated with the intent of Part-M Light.</p>
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response

Refer to Section 1

comment

102

comment by: FFVV

The proposals made in the paragraphs 21A308 and 21A309 are a step in the right direction, but they are still too demanding for some parts concerning ELA1 and ELA2. For these aircrafts, the realization of all parts, even the primary structure or flight controls parts, should be possible by the owner when he has the definition data of the parts. We often need this when repairing gliders or aircrafts when structural parts need to be re done.

For ELA1 and ELA2, it is therefore necessary to simplify the system or create a CL V that would allow the owner to redo all the parts as long as he has the design data from TC OLDER. After manufacture, it would establish a certificate of conformity (Cofc) in order to be able to assemble the part or the piece of structure.

Proposal modification:

M A 501

(e) Notwithstanding point (a), an owner of an ELA1 or ELA2 aircraft may assume responsibility and permit the installation of a component that is:

1. not life-limited, ~~nor part of the primary structure, nor part of the flight controls;~~
2. subject to the component being identified for installation in the aircraft;
3. manufactured in compliance with the applicable design; and
4. marked in accordance with Subpart Q of Annex I (Part 21) to Regulation (EU) No 748/2012.

One question:

These developments are good but this raises the question of aircrafts that already exist. How are you going to do it for these? Will the agency assign a CL for the parts of these Aircraft?

An odder point:

As many people who work in the maintenance of aircraft ELA1 / ELA2 are not workshops under F (and therefore they can not establish EASA Form One) it necessary to allow to allow to dismantle a part of an ELA1 / ELA2, to revise it and to refit it on another ELA / ELA2 aircraft of the same type by establishing a maintenance Cofc.

Proposition:

*'M.A.502 Component maintenance and release requirements after maintenance (a) Except for components referred to in point M.A.501(e) and (f)21.A.307(c) of Annex I (Part-21) to Regulation (EU) No 748/2012, the maintenance of components shall be performed and released on an EASA Form 1, or equivalent, by maintenance organisations appropriately approved in accordance with Section A, Subpart F of this Annex (Part-M) or with Annex II (Part-145). (b) By derogation from point (a), maintenance of a component in accordance with aircraft maintenance data or, if agreed by the competent authority, in accordance with component maintenance data, may be performed by an A-rated organisation approved in accordance with Section A, Subpart F of this Annex (Part-M) or with Annex II (Part-145) as well as by certifying staff referred to in point M.A.801(b)2 only whilst such components **or part** are fitted to the aircraft or **on an aircraft of the same type.***

response

Refer to Section 1



comment	<p>104 comment by: FFVV</p> <p>The proposals made in the paragraphs 21A308 and 21A309 are a step in the right direction, but they are still too demanding for some parts concerning ELA1 and ELA2. For these aircrafts, the realization of all parts, even the primary structure or flight controls parts, should be possible by the owner when he has the definition data of the parts. We often need this when repairing gliders or aircrafts when structural parts need to be re done.</p> <p>Proposal modification:</p> <p>M A 501</p> <p>(e) Notwithstanding point (a), an owner of an ELA1 or ELA2 aircraft may assume responsibility and permit the installation of a component that is:</p> <ol style="list-style-type: none"> 1. not life-limited, nor part of the primary structure, nor part of the flight controls; 2. subject to the component being identified for installation in the aircraft; 3. manufactured in compliance with the applicable design; and 4. marked in accordance with Subpart Q of Annex I (Part 21) to Regulation (EU) No 748/2012. <p>One question:</p> <p>These developments are good but this raises the question of aircrafts that already exist. How are you going to do it for these? Will the agency assign a CL for the parts of these Aircraft?</p>
response	<p>Refer to Section 1</p>
comment	<p>110 comment by: FNAM</p> <p>FNAM and GIPAG thank EASA for the flexibility provided for ELA1 and ELA2 owners.</p>
response	<p>Refer to Section 1</p>
comment	<p>206 comment by: EHA</p> <p>Ref. M.A. 501, point (a) on Page 10 compared with 21.A.308 (page 8), 21.A.309 (table on page 9) and GM 21.A.91(g) (page 13). Page 5, para 3 refers to this concern, but it doesn't appear there is intention to harmonize the terms. COMMENT: Made potentially confusing via mix of terms ie. "Component" (M.A. 501) vs. "Parts or appliances" (21.A.308, 21.A.309, GM 21.A.91)</p>
response	<p>Refer to Section 1</p>
comment	<p>222 comment by: British Airways Engineering</p> <p>We would like to ask clarification on standard parts please. We strongly ask EASA to state clearly in the regulation that all parts identified as "standard part" in a design document, or airworthiness manual issued by the design holder, is considered as CL</p>

III, when the design holder fails to do any classification of those parts used in their products. At this moment, as it is in this NPA, without explicit classification from the design holder, all standard parts (together with all other parts) would have CL I category, what we think is not the intention of EASA. Please write an extra paragraph explaining the CL level and possible acceptance of standard parts.

response **Refer to Section 1**

comment

266

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, pages 10-11/32, point M.A.501

2. PROPOSED TEXT / COMMENT :

It is proposed to amend the new paragraph (a) of this point to read:

“(a) A component shall only be installed on an aircraft or on another component when it is in a satisfactory condition, meets the applicable release requirements defined in **the instructions for continued airworthiness point 21.A.309 of Annex I (Part 21) to Regulation (EU) No 748/2012** or **the applicable requirements defined in point M.A.502 for maintenance certification**, and is marked in accordance with Subpart Q of Annex I (Part 21) to Regulation (EU) No 748/2012, unless otherwise specified in Annex II (Part-145) or Subpart F, Section A of Annex I to this Regulation.”

3. RATIONALE / REASON :

Airbus proposal includes the publication of the release standards in the instructions for continued airworthiness (refer to point 21.A.308). This will ease the acceptance of components by AMO (AMO refer not frequently to Part-21, but to Part-145 and maintenance data defined by point 145.A.45).

Reference is made to a component that meets the release requirements from production. In the context of Regulation (EU) No 1321/2014, components are not released but component maintenance is released/certified; reference is made to “certification of maintenance” (ref. point 145.A.50 title).

response **Refer to Section 1**

comment

267

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 11/32, point M.A.501

2. PROPOSED TEXT / COMMENT :

It is proposed to amend the paragraph (b) of this point to read:

“(b) Prior to installation of a component on an aircraft the person or approved maintenance organisation shall ensure that the particular component is eligible to be fitted when different modification and/or airworthiness directive configurations **or any other use restriction** may be applicable.”

3. RATIONALE / REASON :

We propose to add the wording “or any other use restriction” in order to cover cases such as a repair design approval that restricts the component use to an aircraft design configuration or an individual aircraft.



response

Refer to Section 1

comment

268

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 11/32, point M.A.501

2. PROPOSED TEXT / COMMENT :

It is proposed to delete the paragraph (f) of this point.

3. RATIONALE / REASON :

Are instruments and equipment “that do not need to be approved in accordance with the applicable airworthiness requirements” (point CAT.IDE.A.100 wording) subject to the following airworthiness requirements?

- Point M.A.301 indicates that all maintenance must be accomplished in accordance with the M.A.302 aircraft maintenance programme. Point M.A.302 states that the aircraft maintenance programme must establish compliance with (i) instructions issued by the competent authority; (ii) instructions for continuing airworthiness issued under Part-21; and (iii) additional or alternative instructions proposed by the owner or the CAMO. It is also worth noting that point M.A.304 requires the modifications and repairs be carried out using data approved by the Agency or under Part-21.

- As stated in the NPA 2014-27, “The tasks listed in M.A.301 aim at ensuring the continuing airworthiness of the aircraft and the serviceability of both operational and emergency equipment. These tasks are the responsibility of the owner/operator/CAMO (as applicable according to M.A.201), except for the execution and release of maintenance which are the responsibility of the maintenance organisation or the person who performed them”. Point M.A.101 indicates that maintenance is one of the measures taken to ensure airworthiness is maintained.

- In accordance with point M.A.708, the CAMO shall establish a written maintenance contract with AMO ensuring that all maintenance is ultimately carried out by an AMO (in some cases, individual work orders addressed to AMO).

- Point 145.A.50 indicates that “a certificate of release to service shall be issued by appropriately authorised certifying staff on behalf of the organisation when it has been verified that all maintenance ordered has been properly carried out by the organisation [...]”.

It is believed that the answer is ‘no’. Therefore, their installation on aircraft (as part of the aircraft configuration i.e. installation by modification, scheduled/unscheduled replacement by a task) is not considered as a continuing airworthiness task. They should not be discussed under the Regulation (EU) No 1321/2014.

It is worth mentioning that the review group of RMT.0521 ‘Airworthiness review process’ came to the conclusion for operational requirements that “requirements of Regulation (EU) No 965/2012 that have an impact on Continuing Airworthiness should be addressed by the items ruled by the Part-M provisions, such as the AMP, modifications, repairs, etc. Such requirements require no special treatment e.g. all weather operations (AWOPS), reduced vertical separation minima (RVSM), ...”. It



	shows that aircraft items should be processed through the initial airworthiness process in order to activate the continuing airworthiness process.
response	Refer to Section 1
comment	<p>413 comment by: PPL/IR Europe</p> <p>While it is understood that Part-ML has not yet come into force, it is critical that the Opinion resulting from this task includes the relevant changes to Part-ML in addition to those changes to Part-M. Since the text for Part-ML has not been published, we cannot propose specific changes in this comment.</p> <p>This would also be a good opportunity to align the important alleviation for owner-responsibility parts (now proposed as M.A.501(e)) with the weight thresholds for Part-ML (2730 kg). In particular, if the paragraph is moved to Part-ML, it should no longer be necessary to qualify the alleviation:</p> <p>Proposal In Part-ML, introduce the following equivalent to the proposed M.A.501(e)</p> <p>Notwithstanding point (a), an owner of an ELA1 or ELA2 aircraft may assume responsibility and permit the installation of a component that is ...</p>
response	Refer to Section 1
comment	<p>438 comment by: ARSA</p> <p>ARSA suggests that M.A. 501 be revised as follows:</p> <p>M.A. 501</p> <p>(a) Except as provided in point (c), no component may be fitted unless it is in a satisfactory condition, has been appropriately released to service on an EASA Form 1 or equivalent and is marked in accordance with Annex I (Part-21), Subpart Q, unless otherwise specified in Annex I (Part-21) to Regulation (EU) No 748/2012, Annex II (Part-145) or Subpart F, Section A of Annex I to this Regulation.</p> <p>(b) Prior to installation of a component on an aircraft the person or approved maintenance organisation shall ensure that the particular component is eligible to be fitted when different modification and/or airworthiness directive configurations may be applicable.</p> <p>(c) Standard parts shall only be fitted to an aircraft or a component when the maintenance data specifies the particular standard part. Standard parts shall only be fitted when accompanied by evidence of conformity traceable to the applicable standard.</p> <p>(c) Non-critical parts received without an EASA Form 1 or other document issued under Part-21, subpart F or G (including standard parts, manufacturer's standard parts not meeting the Agency's definition of standard part and COTS parts as defined</p>

in AMC M.A.501(c)) may only be fitted when the part is referenced in the design data, manufacturer's illustrated parts catalog and/or maintenance data.

(d) Material being either raw material or consumable material shall only be used on an aircraft or a component when the aircraft or component manufacturer states so in relevant maintenance data or as specified in Annex II (Part-145). Such material shall only be used when the material meets the required specification and has appropriate traceability. All material must be accompanied by documentation clearly relating to the particular material and containing a conformity to specification statement plus both the manufacturing and supplier source.

response **Refer to Section 1**

comment 443 comment by: *Safran Cabin Germany GmbH DOA 21J.067*

Please ensure consistent wording, i.e. parts and appliances instead of component or equipment.

response **Refer to Section 1**

M.A.502

p. 11-12

comment 63 comment by: *AIR FRANCE / ZYLAWSKI Christine*

M.A. 502 Component maintenance and release requirements after maintenance
Comments : The CMM should stay available for CL II and CL III.

response **Refer to Section 1**

comment 82 comment by: *René Meier, Europe Air Sports*

M.A.502 Component maintenance and release requirements after maintenance
p 12/32
(d)

This maintenance 'derogation' covers ELA1 aircraft so should properly be covered in Part-M Light. The General Aviation Task Force 2 (GATF 2), has already considered these issues at length and produced a recommendation. The scope and consistency of the two draft rules cannot be established by external reviewers in isolation. This is a major example of the lack of coordination between these two draft rules (NPA2017-19 and Part-M Light).

Our question:
Should not this derogation not be extended to ELA2 aircraft to be consistent with M.A.501?



response **Refer to Section 1**

comment 83 comment by: René Meier, Europe Air Sports

M.A.502 Component maintenance and release requirements after maintenance
p 12/32
(e)

Remark

Accepted, but it must be checked and made consistent with the future Part-M light as mentioned in comment on M.A.502(d) above.

response **Refer to Section 1**

comment 105 comment by: FFVV

An odder point:

As many people who work in the maintenance of aircraft ELA1 / ELA2 are not workshops under F (and therefore they can not establish EASA Form One) it necessary to allow to allow to dismantle a part of an ELA1 / ELA2, to revise it and to refit it on another ELA / ELA2 aircraft of the same type by establishing a maintenance Cofc.

Proposition:

*'M.A.502 Component maintenance and release requirements after maintenance (a) Except for components referred to in point M.A.501(e) and (f)21.A.307(c) of Annex I (Part-21) to Regulation (EU) No 748/2012, the maintenance of components shall be performed and released on an EASA Form 1, or equivalent, by maintenance organisations appropriately approved in accordance with Section A, Subpart F of this Annex (Part-M) or with Annex II (Part-145). (b) By derogation from point (a), maintenance of a component in accordance with aircraft maintenance data or, if agreed by the competent authority, in accordance with component maintenance data, may be performed by an A-rated organisation approved in accordance with Section A, Subpart F of this Annex (Part-M) or with Annex II (Part-145) as well as by certifying staff referred to in point M.A.801(b)2 only whilst such components **or part** are fitted to the aircraft or **on an aircraft of the same type.***

response **Refer to Section 1**

comment 124 comment by: Luftfahrt-Bundesamt

LBA asks: what is the meaning of equivalent?

LBA-Justification: There is no other release document for maintenance on



components according to M.A.501(a) to (d). If it is intended to refer to BASA agreements please specify accordingly. Currently such equivalent documents are only referred to in their relevant BASA.

response **Refer to Section 1**

comment 196 comment by: Airlines for Europe (A4E)

NPA Text subject to comments (abbreviated as applicable):

(a) Except for components referred to in point M.A.501(e) and (f)21.A.307(c) of Annex I (Part-21) to Regulation (EU) No 748/2012, the maintenance of components shall be performed and released on an EASA Form 1, or equivalent, by maintenance organisations appropriately

Comment:

The CMM should stay available for CL II and CL III.

response **Refer to Section 1**

comment 269 comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, pages 11-12/32, point M.A.502

2. PROPOSED TEXT / COMMENT :

It is proposed to amend this point to read:

“M.A.502 Component maintenance and ~~release requirements after certification of maintenance~~

(a) Except for components referred to in point M.A.501(e) ~~and (f)21.A.307(c)~~ of Annex I ~~(Part-21) to Regulation (EU) No 748/2012~~, the maintenance of components shall be performed and ~~released certified~~ on an EASA Form 1, or equivalent, by maintenance organisations appropriately approved in accordance with Section A, Subpart F of this Annex (Part-M) or with Annex II (Part-145).

(b) [...]. Component maintenance performed in accordance with this point is not eligible for the issuance of an EASA Form 1 and shall be subject to the aircraft ~~maintenance certification release~~ requirements provided for in point M.A.801.

(c) [...]. Component maintenance performed in accordance with this point is not eligible for the issue of an EASA Form 1 for the isolated component and shall be subject to the engine/APU ~~maintenance certification release~~ requirements.

(d) [...]

Component maintenance performed in accordance with point (d) is not eligible for the issuance of an EASA Form 1 and shall be subject to the aircraft ~~maintenance certification release~~ requirements provided for in point M.A.801.

(e) [...]. Component maintenance performed in accordance with this point is not eligible for the issuance of an EASA Form 1 and shall be subject to the aircraft ~~maintenance certification release~~ requirements provided for in point M.A.801.”

With regard to paragraph (a), we do not see the reason(s) why a spare component manufactured by an organisation not holding a POA would require to be maintained



only by organisations holding a MOA. Why would a maintenance organisation not holding a MOA be not enough?

3. RATIONALE / REASON :

Reference is made to “release requirements after maintenance” in the proposed amendments. In the context of Regulation (EU) No 1321/2014, reference is made to “certification of maintenance” (ref. point 145.A.50 title).

Reference to the paragraph (f) of point M.A.501 is proposed for deletion in a previous comment.

response **Refer to Section 1**

comment 414 comment by: *PPL/IR Europe*

Exceptions in (a) should also be introduced for parts of criticality level higher than I, which would not require a Form 1 if installed new. See our comment 410 on 21.A.31.

It should be possible for Part-M Subpart F, Part-CAO or Part-145 organisations and staff to use their discretion in accepting parts with criticality level of III or IV, i.e. those that were originally manufactured outside an aviation QMS. To require such parts to be overhauled or repaired within the aviation system by requiring a Form 1 for release to service is inconsistent with the concept set out in this NPA.

These aspects should be separately considered for Part-M and Part-ML, to ensure proportionality.

response **Refer to Section 1**

comment 444 comment by: *Safran Cabin Germany GmbH DOA 21J.067*

Please ensure consistent wording, i.e. parts and appliances instead of component or equipment.

response **Refer to Section 1**

comment 454 comment by: *FLARM Technology*

It's not reasonable that e.g. in case of parts with assigned CL III, those parts cannot be maintained by the same ISO 9001 organization that manufactured them, since the requirement is that an EASA Form 1 needs to be issued. Many non-ETSOd parts (mostly avionics not required by airworthiness or operational rules) can in fact only be repaired by the manufacturer, since only the manufacturer has the specific competence to repair these parts (also because of the need for specific and expensive testing equipment). Requiring an EASA Form 1 implies that these avionics, when needing maintenance, instead need to be scraped and replaced by new parts, severely increasing the cost for the owner of the aircraft.

response **Refer to Section 1**



Proposed amendments to Part-145 – 145.A.42

p. 12

comment	<p>111</p> <p>comment by: <i>FNAM</i></p> <p>ISSUE</p> <p>In 2015, FNAM and GIPAG asked to French DGAC to authorize PART-145 organizations to establish EASA Form 1 parts on specific non-complex-aircraft parts (imported or commercial without traceability). The NPA 2017-19 doesn't allow this privilege since it is impossible for PART-145 organizations to install non-EASA Form 1 parts provided by another organization (145.A.42(b)). PART-145 can establish EASA Form 1 on spare parts only for internal use thanks to the previous regulation 145.A.50(d). More flexibility should be provided for PART-145 organizations. Since the Quality system warrants safe procedures, tools and documentation, PART-145 organizations should be allowed to establish EASA Form 1 from any spare parts. To avoid any misunderstanding, FNAM and GIPAG ask also to list concretely which parts and appliances are allowed to be manufactured by PART-145 organization without an EASA Form 1 (145.A.42(c)).</p> <p>PROPOSAL</p> <p>Clarify the conditions of 145.A.50(d)</p> <p>Provide more flexibility for non-complex aircraft used parts and appliances</p> <p>(c) Add a list of spare parts and appliances are allowed to be manufactured by PART-145 organization without an EASA Form 1</p>
response	<p>Refer to Section 1</p>
comment	<p>125</p> <p>comment by: <i>Luftfahrt-Bundesamt</i></p> <div style="border: 1px solid black; padding: 5px;"> <p>Segregation classifications have to be present in Annex II (Part-145).</p> <p><u>LBA-Justification</u>: With the new amended point 145.A.42 the former 145.A.42(a) containing the classifications for segregation has been removed.</p> </div>
response	<p>Refer to Section 1</p>
comment	<p>198</p> <p>comment by: <i>Airlines for Europe (A4E)</i></p> <p>NPA Text subject to comments (abbreviated as applicable):</p> <p>(d) Notwithstanding points (a) and (b), equipment that, in accordance with Commission Regulation (EU) No 965/2012 is exempted from an airworthiness approval, shall be acceptable for installation on an aircraft with documentation identifying the equipment and the manufacturer and being eligible for installation in accordance with the operator's requirements.</p> <p>Comment:</p> <p>Certification of non required on board equipment as per (e.g.) CAT.IDE.A.100(b):</p>

Quote "(b) Instruments and equipment not required by this Subpart that do not need to be approved in accordance with the applicable airworthiness requirements, but are carried on a flight, shall comply with the following:

(1) the information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply with Annex I to Regulation (EC) No 216/2008 or CAT.IDE.A.330, CAT.IDE.A.335, CAT.IDE.A.340 and CAT.IDE.A.345; and

(2) the instruments and equipment shall not affect the airworthiness of the aeroplane, even in the case of failures or malfunction." Unquote

There seems to be an ambiguity in the above (and similar) requirement(s) in 965/2012 (even CAT.IDE.A.100(b) is not mentioned in the GM 145.A.42(d), see comment there). Which "non-required" equipment (by this Subpart) carried on board in "not required to be approved in accordance with airworthiness requirements"? This is somewhat recursive because neither 145.A.42 nor 965/2012 defines that. The concern is that NAAs may interpret the combination of (new) 145.A.42(d) and GM 145.A.42(d) with the relevant parts of 965/2012 in that respect that certain "loose" and "installed" cabin equipment like cushions, passenger headphones (loose or installed), or even installed decorative items (e.g. Christmas wreath) may not fall under this exemption. Therefore we suggest to clarify that either in 145.A.42(d) or the GM 145.A.42(d) accordingly.

Proposal (added text in italic and underscored): (d) Notwithstanding points (a) and (b), equipment that, in accordance with Commission Regulation (EU) No 965/2012 is exempted from an airworthiness approval and any equipment that is not required by any part of Commission Regulation (EU) No 965/2012, shall be acceptable for installation on an aircraft with documentation identifying the equipment and the manufacturer and being eligible for installation in accordance with the operator's requirements.

response

[Refer to Section 1](#)

comment

199

comment by: Airlines for Europe (A4E)

NPA Text subject to comments (abbreviated as applicable):

d) Notwithstanding points (a) and (b), equipment that, in accordance with Commission Regulation (EU) No 965/2012 is exempted from an airworthiness approval, shall be acceptable for installation on an aircraft with documentation identifying the equipment and the manufacturer and being eligible for installation in accordance with the operator's requirements.

Comment:

Practically, this equipment will not have a CL indication. This may be confusing to incoming goods inspectors. They will search for a CL indication, and if it is not there. Question may arise whether it was it overlooked by the DAH to issue it or was it really an equipment not eligible for CL indication?

response

[Refer to Section 1](#)

comment

209

comment by: Ferhan SADIKOGLU



A big confusion will be occurred in receiving inspections of parts while going through the accompanying documents. How will one know if Form-1 is not accompanied, whether there should be Form-1 but missed or there shouldn't be though. Even for the CL II or CL III how will they be sure if the COC belongs to AS9100 registered company or just ISO9001?

It is nearly impossible to practice these proposed terms rightly in maintenance environment. I'm afraid a lot of escapes will be happened and desired outcome will not be reached.

response **Refer to Section 1**

comment 223 comment by: *British Airways Engineering*

Classification difficulties example: The same part may fit to a B747 and a B777 but may have different CL on the different A/C type. Or may have no CL designated on the older A/C type while have a CL II on the other A/C type. How can a CAMO or an MRO manage such ambiguity?

response **Refer to Section 1**

comment 270 comment by: *AIRBUS*

1. PARAGRAPH / SECTION :
NPA 2017-19, page 12/32, point 145.A.42

2. PROPOSED TEXT / COMMENT :
It is proposed to amend this point to read:
"145.A.42 Acceptance of components

(a) The **approved** maintenance organisation shall classify, appropriately segregate and install components in accordance with Subpart E of Annex I (Part-M) and Annex II (Part-145).

(b) Additionally, ~~in the case of used components~~, the **approved** maintenance organisation shall **only** install **used** components **received** from a third party **only** when ~~they are released with the component maintenance performed is certified~~ **on** an EASA Form 1 or equivalent.

(c) [...].

~~(d) Notwithstanding points (a) and (b), equipment that, in accordance with Commission Regulation (EU) No 965/2012 is exempted from an airworthiness approval, shall be acceptable for installation on an aircraft with documentation identifying the equipment and the manufacturer and being eligible for installation in accordance with the operator's requirements."~~

Is it still necessary to refer to "Annex II (Part-145)" in the paragraph (a)?

3. RATIONALE / REASON :
For consistency, reference is made to Approved Maintenance Organisations (AMO) rather than maintenance organisations.
Wordings such as "shall install used components when they are released with an EASA Form 1" are found inappropriate: in the context of Regulation (EU) No 1321/2014, components are not released but component maintenance is



released/certified; reference is made to “certification of maintenance” (ref. point 145.A.50 title).

The installation on aircraft (by modification or scheduled/unscheduled replacement task) of instruments and equipment “that do not need to be approved in accordance with the applicable airworthiness requirements” (point CAT.IDE.A.100 wording – Regulation (EU) No 965/2012) is not considered a continuing airworthiness task. They should not be discussed under the Regulation (EU) No 1321/2014.

response **Refer to Section 1**

comment

271

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 12/32, point 145.A.42

2. PROPOSED TEXT / COMMENT :

It is proposed to amend point M.A.504 to read:

“M.A.504 Control of ~~unserviceable~~ components

(a) All components shall be classified and appropriately segregated into the following categories:

- 1. Serviceable components classified in accordance with point M.A.501(a).**
- 2. Standard parts classified in accordance with point M.A.501(c).**
- 3. Material both raw and consumable used in the course of maintenance classified in accordance with point M.A.501(d).**
- 4. Unserviceable components which shall be maintained in accordance with this Regulation.**
- 5. Unsalvageable components classified in accordance with point M.A.504(d).**

(ab) A component shall be considered unserviceable in any one of the following circumstances:

- 1. expiry of the service life limit as defined in the Aircraft Maintenance Programme required by point M.A.302;**
- 2. [...];**
- 3. absence of the necessary information to determine the airworthiness status or eligibility for installation;**
- 4. [...];**
- 5. involvement in an incident or accident likely to affect its serviceability.**

(bc) [...].

(cd) [...].

(de) Any person or organisation accountable under this Annex (Part-M) shall, in the case of a point **(ed)** unsalvageable components:

- 1. retain such component in the point **(bc)** location, or;**
- 2. [...].**

(ef) Notwithstanding point **(de)** a person or organisation accountable under this Annex (Part-M) may transfer responsibility of components classified as unsalvageable to an organisation for training or research without mutilation.”

In the (new) paragraph (b) of point M.A.504, reference is made to both the airworthiness (status) and the serviceability of a component (respectively in items 3. and 5.). Can the Agency provide a definition for each of these terms that makes an explicit distinction with the other (with particular attention to the introductory sentence of point M.A.301)?



3. RATIONALE / REASON :

This NPA removes the list of categories used for the classification and segregation of components (previously in point 145.A.42 paragraph (a)). With the centralisation of component requirements in the Part-M, it is found appropriate to move it to point M.A.504. Or was the intent to move the categories into an AMC of point 145.A.42 or of point M.A.500 series?

The title of point M.A.504 is amended to take into account all components.

Finally, reference is made to the AMP required by the point M.A.302 for sake of consistency in Part-M.

response **Refer to Section 1**

comment 359 comment by: EHA

Cross CAA equivalency: How will these new CL's relate to new parts originating from other countries? Does something like 21.A.308 (d) apply (Page 9)? Part 145.A.42 may need additional clarification for parts not manufactured in the EU.

Reference: Part 145.A.42 on page 12, appears to account for new, EASA sourced parts, but not how to deal with new parts with no CL originating from a non-EASA source. Would foreign parts be considered CL I as suggested in 21.A.308 (d) on page 9?

response **Refer to Section 1**

comment 368 comment by: IATA

Existing Text	Comment / Proposed Text	Justification
145.A.42 Acceptance of components ...(a) to (f)	145.A.42 Acceptance of components ...(a) TBD	The replacement of the old 145.A.42 (points a to f) with the new 145.A.42 (points a to d) seems to be generating confusion by having a "self-reference" in point 145.A.42(a): the only section in Annex II (Part-145) referring to components classification and segregation was the old 145.A.42. Removing that, one can't call upon Part-145 provision for component classification and segregation anymore, however it can be done via the text proposed in the new 145.A.42(a). Moreover, Subpart E of Part M is nil ("in development").

response **Refer to Section 1**

comment 369 comment by: IATA



Existing Text	Comment / Proposed Text	Justification
145.A.42(c)	TBD	It should be confirmed that introducing the new system with assignation of CLs does not infringe on the Part-145 organization rights to fabricate (per 145.A.42(c)) a restricted range of parts for its own use in compliance with AMC145.A.42(c), irrespective of a (possible with the new rules) CL I assignation to such parts. The statement made in this NPA under the "Rationale" section (see page 21 of 32) may not be perceived that obvious and straight-forward by all stakeholders.

response **Refer to Section 1**

comment

397 comment by: *Aviation Suppliers Association*

The proposed NPA 145.A.42 eliminates several important categories, including the process for accepting (1) Unserviceable components intended for maintenance, (2) Standard parts which are typically sold and accepted based on a C of C, and (3) raw materials and consumables which are also typically accepted on a certificate identifying the material or consumable.

The proposal eliminates acceptance of these three categories, and if they are not designated in an appropriate CL (which is likely) then they will have to be accompanied by an EASA Form 1 or equivalent (the default for parts that are not designated into a CL level). This is a problem because these categories of parts are typically not eligible for EASA Form One

As discussed elsewhere, it is highly likely that design approval holders will not categorize parts unless EASA mandates such categorization. This conclusion is based on part on the design approval holder community failure to categorize parts under the FAA commercial parts regulation. If this is the case, then standard parts will default to CL1 and require a Form 1.

This means that in the future, all EASA 145 organizations will require an EASA Form 1 on standard parts. Typically, standard parts are not issued EASA Form 1 or equivalent. In fact, they are ineligible for equivalent documentation when produced in the United States.

This also makes it impossible to accept parts for maintenance, which is a problem since component level maintenance is one of the things that some 145 organizations are supposed to be able to accomplish.



If this language remains unchanged, then a system would need to be developed to issue tags for pre-existing standard parts as well as new standard parts (which are typically not processed through the production approval holder's system so they do not get an opportunity for EASA Form One). It would also need to identify ways to tag unserviceable parts, raw materials, and consumables, in order to permit them to be accepted.

There is a huge volume of standard parts, many of which are produced for use in other industries in addition to civil aviation. The industry norm has been to accept them on a certificate of conformity (C of C).

We recommend retaining language recognizing the acceptability of past practices, such as:

"(e) The maintenance organisation may also classify, appropriately segregate and install components in these categories:

1. Standard parts used on an aircraft, engine, propeller or other aircraft component when specified in the manufacturer's illustrated parts catalogue and/or the maintenance data.

2. Material both raw and consumable used in the course of maintenance when the organisation is satisfied that the material meets the required specification and has appropriate traceability. All material must be accompanied by documentation clearly relating to the particular material and containing a conformity to specification statement plus both the manufacturing and supplier source.

(f) The maintenance organisation may also classify, and appropriately segregate components in these categories (but may not install them until appropriate maintenance confirms their acceptability for installation):

1. Unserviceable components which shall be maintained in accordance with this section.

2. Unsalvageable components."

response **Refer to Section 1**

comment 401 comment by: DGAC France

Because CL IV parts and appliances are not to be marked with a CL level (see proposed 21.A.804), how can we distinguish the two following situations:

- A part or appliance not marked with CL information because the design holder has decided not to assign CLs for that part or appliance. The part or appliance shall then be considered as CL I and needs a Form 1.

- A part or appliance which is not marked with CL information because the design holder assigned a CL IV to that given part or appliance (no Form 1 required).

Without mandating Part-145 to have access and to use on a daily basis CL lists/information for every product for which they order parts and appliances, the



two above presented cases cannot be distinguished. This implies huge changes in term of Part-145 receiving process which are, in the opinion of the French authority, underestimated by the presented NPA Impact Assessment.

response **Refer to Section 1**

comment 424 comment by: MARPA

The proposed NPA 145.A.42 eliminates the acceptance of Standard Parts based on a C of C and will instead require standard parts either to be designated in an appropriate CL or accompanied by an EASA Form 1. This could be highly problematic because, as discussed elsewhere, it is highly unlikely that DAHs will take the necessary steps to categorize each part and article. Thus, standard parts will default to CLI and require a Form 1.

This means that in the future, all EASA 145 organizations will require an EASA Form 1 on standard parts. For those parts manufactured in the United States or other locations outside of Europe, the parts may not be eligible for an equivalent release certificate (e.g., the FAA 8130-3 tag, for which standard parts are ineligible) or EASA may not recognize the release form on which the standard parts are released as being equivalent to a Form 1.

We therefore recommend retaining language that allows standard parts to be accepted with only a manufacturer's C of C.

response **Refer to Section 1**

comment 435 comment by: ARSA

ARSA suggests that this section be revised by adding the language in red.

145.A.42 Acceptance of Components

(a) All components shall be classified and appropriately segregated into the following categories:

1. **Critical** components which are in a satisfactory condition, released on an **EASA Form 1** or equivalent and marked in accordance with Subpart Q of Annex I (Part-21) to Regulation (EU) No 748/2012.
2. **Non-critical components which are in satisfactory condition, released on an EASA Form 1 or other document issued under part 21, subparts F or G indicating that the component was produced under a Part-21 production inspection system or production quality system as applicable and marked in accordance with Subpart Q of Annex I (Part-21) to Regulation (EU) No 748/2012.**
3. **Non-critical components other than those described in point 2, above, may be installed during maintenance when they are traceable to an approved design as reflected in the design or maintenance data (e.g., drawings, specifications, Instructions for Continued Airworthiness, Component Maintenance and Overhaul**



Manuals, Illustrated Parts Catalogue, Illustrated Parts List, Illustrated Provisioning Documents or other data approved by the Agency). This includes the vast majority of standard parts as defined by the Agency, manufacturer's standards not meeting the definition of standard part and commercial-off-the-shelf-parts.

4. Unserviceable components which shall be maintained in accordance with this section.

5. Unsalvageable components which are classified in accordance with point 145.A.42(d).

6. Standard parts, manufacturer's standard parts not meeting the Agency's definition of standard part and commercial-off-the-shelf parts used on an aircraft, engine, propeller or other aircraft component when specified in the design data, manufacturer's illustrated parts catalogue and/or the maintenance data.

7. Material both raw and consumable used in the course of maintenance when the organisation is satisfied that the material meets the required specification and has appropriate traceability. All material must be accompanied by documentation clearly relating to the particular material and containing a conformity to specification statement plus both the manufacturing and supplier source.

8. Components referred to in point 21A.307(c) of Annex I (Part-21) to Regulation (EU) No 748/2012.

response **Refer to Section 1**

comment 445 comment by: *Safran Cabin Germany GmbH DOA 21J.067*

Please ensure consistent wording, i.e. parts and appliances instead of component or equipment.

response **Refer to Section 1**

comment 455 comment by: *FLARM Technology*

It's not reasonable that e.g. in case of parts with assigned CL III, those parts cannot be maintained by the same ISO 9001 organization that manufactured them, since the requirement is that an EASA Form 1 needs to be issued. Many non-ETSOd parts (mostly avionics not required by airworthiness or operational rules) can in fact only be repaired by the manufacturer, since only the manufacturer has the specific competence to repair these parts (also because of the need for specific and expensive testing equipment). Requiring an EASA Form 1 implies that these avionics, when needing maintenance, instead need to be scraped and replaced by new parts, severely increasing the cost for the owner of the aircraft.

response **Refer to Section 1**

comment 465 comment by: *ARSA*



ARSA proposes the following revision to AMC 145.A.42(a)

AMC 145.A.42(a)
 1. A document equivalent to an EASA Form 1 may be:
 (a) a release document issued by an organisation under the terms of a bilateral agreement signed by the European Community;
 (b) a release document issued by an organisation approved under the terms of a JAA bilateral agreement until superseded by the corresponding agreement signed by the European Community;
 (c) a JAA Form One issued prior to 28 November 2004 by a JAR 145 organisation approved by a JAA Full Member State;
 (d) in the case of new aircraft components that were released from manufacturing prior to the Part-21 compliance date the component should be accompanied by a JAA Form One issued by a JAR 21 organisation approved by a JAA Full Member Authority and within the JAA mutual recognition system;
 (e) a JAA Form One issued prior to 28 September 2005 by a production organisation approved by a competent authority in accordance with its national regulations.
 2. For acceptance of standard parts, **manufacturer's standard parts not meeting the Agency's definition of standard part, commercial-off-the-shelf parts**, raw material and consumable material, refer to AMC M.A.501(c) and AMC M.A.501(d).

response [Refer to Section 1](#)

145.A.45

p. 13

comment 37 comment by: *AAR Aircraft Component Services - Amsterdam*

As a component maintenance organization we purchase many parts from different sources, such as manufacturer's, surplus suppliers and distributors. We encourage the Agency's effort to allow a classification system in order to differentiate between several kind of aircraft parts.
 However, the NPA does not make clear how the repair market needs to be informed by the design holder about the assigned classification.
 We anticipate a lot of confusion with incoming parts inspectors when parts are supplied without an EASA Form 1, especially when such parts are supplied by sources other than the design holder.
 Also, different design holders may assign different classifications to the same (commercial) part which will increase the confusion even more.

response [Refer to Section 1](#)

comment 179 comment by: *EHA*

145.A.45, item 3, what if the PAH elects not to provide the CL, as is their option?

response [Refer to Section 1](#)

comment 224 comment by: *British Airways Engineering*



response	<p>How can a Part-145 approved organisation manage the problem when a certain P/N falling into different CL level on different A/C types (or engine types or higher assemblies)? How can the MRO avoid mixing those parts? How will the aviation market distinguish between those differently certified parts? Please add some more guidance for such cases.</p> <p>Refer to Section 1</p>
comment	<p>272 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 13/32, point 145.A.45</p> <p>2. PROPOSED TEXT / COMMENT : It is proposed to NOT amend the point 145.A.45.</p> <p>3. RATIONALE / REASON : Airbus proposals include the addition to the instructions for continued airworthiness of the list of parts and appliances not requiring the issue of an EASA Form 1 and of the related manufacturing and release standards.</p>
response	<p>Refer to Section 1</p>
comment	<p>372 ❖ comment by: HEICO Aerospace</p> <p>HEICO Comment 1 – Criticality Level - Various Locations Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.</p> <p>Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.” As appropriate, replace “Critical” with “Safety Sensitive.”</p> <p>Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See https://www.easa.europa.eu/faq/19013 for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion. Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”</p>
response	<p>Refer to Section 1</p>
comment	<p>447 comment by: Safran Cabin Germany GmbH DOA 21J.067</p>

145.A.45 introduces an additional burden on Design Approval Holders to assign the CLs in related ICA. In case of some thousand parts comprising cabin monuments there is no rationale to accept this additional burden to just preserve the existing safety level.

response [Refer to Section 1](#)

3.2 Draft EASA decision – Proposed amendments to AMC/GM to Part 21 – GM 21.A.91 p. 13

comment 3 comment by: *Diamond Aircraft Ind. GmbH*

If the design approval holder has demonstrated with a procedure that he is able to determine the CL and demonstrating the required substantiation, he will receive the intended privilege.

Depending on this classification the compliance showing has to be demonstrated.

Taking these facts into account a reclassification to a higher or lower CL should be demonstrated with the suitable compliance showing and never be classified as a major design change, because the "design" is not changed.

Also the validation of such "major changes" around the world would lead to an immense burden and a lot of discussions because this classification is at the moment not contained in international rules.

response [Refer to Section 1](#)

comment 68 comment by: *LHT DO*

1. Please introduce classification criteria based on an assessment of the effect of the part to the safety of the product. The classification criteria proposed in this NPA always result in a major classification irrespective how uncritical the part is. Please keep in mind that in particular in the beginnings all parts will have CL1. Any change to the CL of the part by the non-TC holder would lead to an STC which might be overdone for the particular change.

2. Please clarify that the proposed change is only valid for changes of the CL of a part. Please make sure that a necessary change of parts (e.g. for parts which are not produced any more, or minor cabin parts) would not necessarily lead to an STC if it is planned to remain a CL1 part.

response [Refer to Section 1](#)

comment 157 comment by: *Rolls-Royce Deutschland / DOA Manager D. Stege*

Does the proposed GM indicate, that if the TC Holder changes the CL to a higher CL would require EASA approval prior to publication and under which conditions could EASA disagree to the CL change? Clarification required.

response [Refer to Section 1](#)



comment	180	comment by: EHA
	<ul style="list-style-type: none"> GM 21.A.91, does “parts or appliances” mean “components” or all part categories? <p>Appendix A to GM 21.A.91, likewise to point above “higher CL” may mean “lower criticality”</p>	
response	Refer to Section 1	
comment	225	comment by: British Airways Engineering
	Higher – lower anomaly. Please see our comment at 21.A.309	
response	Refer to Section 1	
comment	273	comment by: AIRBUS
	<p>1. PARAGRAPH / SECTION : NPA 2017-19, page 13/32, point GM 21.A.91</p> <p>2. PROPOSED TEXT / COMMENT : There is no paragraph 3.4. in this GM. Therefore it is difficult to understand where the new text is introduced and the consistency with the other items.</p> <p>3. RATIONALE / REASON : Self-explanatory.</p>	
response	Refer to Section 1	
comment	356	comment by: EHA
	Appendix A to GM 21.A.91, likewise to point above “higher CL” may mean “lower criticality”	
response	Refer to Section 1	
comment	372 ❖	comment by: HEICO Aerospace
	<p>HEICO Comment 1 – Criticality Level - Various Locations</p> <p>Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.</p> <p>Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”</p> <p>As appropriate, replace “Critical” with “Safety Sensitive.”</p> <p>Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral</p>	

agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion. Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

comment 374 comment by: *Embraer S.A.*

Since the CL is part of the Type Design, any change to them must comply with subpart D or E of Part-21. As proposed by the GM of 21.A.91, changes that raise the CL would be classified as major, while they would be minor otherwise. However, no alteration was proposed to section 21.A.91 of Part-21, which states that major change are those have “appreciable effect on the mass, balance, structural strength, reliability, operational characteristics, noise, fuel venting, exhaust emission, operational suitability data or other characteristics affecting the airworthiness of the product”. Therefore, there is a contradiction between the proposed guidance material and the requirement, since the change of a CL does not affect any characteristics listed in the 21.A.91.

response **Refer to Section 1**

comment 400 comment by: *DGAC France*

All along the NPA (21.A.31, 21.A.308, 21.A.309, etc.), parts and appliances used during the assembly of a new product are excluded from the proposed alleviations. The French authority does not see the safety benefit in not expanding the CL approach to parts and appliances used during the assembly of a new product. If this option is considered, then GM n°2 21.A.139(a) should be modified as follow:
"GM No. 2 to 21.A.139(a) Quality System – Conformity of supplied parts or appliances.

(...)

The control of CL I suppliers holding a POA for the parts or appliances to be supplied can be reduced, to a level at which a satisfactory interface between the two quality systems can be demonstrated. Thus, for the purpose of showing conformity, a POA holder can rely upon documentation for parts or appliances released under a suppliers 21.A.163 privileges.

A CL I supplier who does not hold a POA is considered as a sub-contractor under the direct control of the POA quality system.

The control of CL II, III, IV suppliers holding appropriate manufacturing standards according to 21.A.308 for the parts or appliances to be supplied can be reduced, to a level at which a satisfactory interface between the two quality systems can be demonstrated.



A CL II, III, IV supplier who does not hold appropriate manufacturing standards according to 21.A.308 is considered as a sub-contractor under the direct control of the POA quality system."

response **Refer to Section 1**

AMC 21.A.303(c)

p. 14

comment 47 comment by: Royal Netherlands Aviation Organisation
 With 2. The option under 2 is deleted. Is my assumption correct that the liberal approach for gliders and powered gliders (sailplanes/powered sailplanes) is covered by CS-STAN?

response **Refer to Section 1**

comment 274 comment by: AIRBUS

1. PARAGRAPH / SECTION :
 NPA 2017-19, page 14/32, point AMC 21.A.303(c)

2. PROPOSED TEXT / COMMENT :

It is proposed to amend this AMC to read:

"AMC 21.A.303(c) Standard parts

~~1-~~In this context a part is considered as a 'standard part' where it is designated as such by the design approval holder responsible for the **design product, part or appliance**, in which the part is intended to be used. In order to be considered a 'standard part', all design, manufacturing, inspection data and marking requirements necessary to demonstrate conformity of that part should be in the public domain and published or established as part of officially recognised standards, ~~or~~ [...]."

It is unclear who is entitled to recognise official standards.

3. RATIONALE / REASON :

The design approval holder responsible for the product is the TC holder. It is not responsible for the decisions made by a STC holder in the frame of a design solution that changes the product.

response **Refer to Section 1**

comment 415 comment by: PPL/IR Europe

See our comment 417 on AMC 21.A.308(a).

response **Refer to Section 1**

New GM 21.A.308

p. 14

comment 2 comment by: Diamond Aircraft Ind. GmbH



	<p>If the CL is the determining factor for the qualification of a supplier, the same rules have to apply for production parts for the production of new aircraft, engines or propellers.</p> <p>Having the need for a POA for parts for new productions and not having the need for a POA for delivery to maintenance organisations does not make sense.</p> <p>The part-manufacturers are required to set up their quality system and qualification suitable to the CL given in the design data and therefore there should be no difference if the parts will be used in production or in maintenance.</p>
response	<p>Refer to Section 1</p>
comment	<p>55 comment by: TAP Maintenance & Engineering</p> <p>Does this mean that a new A/C must come with all parts with an EASA F1? For commercially parts this shall increase the price of parts known as COTS.</p>
response	<p>Refer to Section 1</p>
comment	<p>69 comment by: LHT DO</p> <p>Are these criteria identical with the criteria for safety assessment in accordance with 25.1309? If not, the criteria might be too weak.</p> <p>Please clarify.</p>
response	<p>Refer to Section 1</p>
comment	<p>275 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, page 14/32, point GM 21.A.308</p> <p>2. PROPOSED TEXT / COMMENT : It is proposed to amend this GM to read: “GM 21.A.308 Criticality levels (CLs) for new pParts and appliances to be installed during maintenance under Regulation (EU) No 1321/2014 The adequacy of the parts and appliances to be installed on a new product during its production is assessed under the POA procedures which include the control of suppliers by the quality system of the organisation that will issue an EASA Form 52 for a new aircraft or an EASA Form 1 for a new engine or propeller, or under the procedures described in point 21.A.126 for incoming parts in the case of organisations manufacturing without a POA. The CLs assigned in accordance with point 21.A.308 list of parts and appliances not requiring the issue of an EASA Form 1 and of the related manufacturing and release standards are is relevant for the purpose of the new parts and appliances being installed during maintenance under Regulation (EU) No 1321/2014 only.” We do not see the reason(s) why a spare component manufactured by an organisation not holding a POA would require to be maintained only by organisations holding a MOA. Why would a maintenance organisation not holding a MOA be not enough?</p>

3. RATIONALE / REASON :

The adequacy of the new and used parts and appliances to be installed on an in-service product under Regulation (EU) No 1321/2014 is assessed under the MOA procedures which include the control of suppliers and subcontractors by the quality system of the organisation (AMC 145.A.70(a)) that will issue a certificate of release to service for the installation on an aircraft or another component.

response **Refer to Section 1**

comment 353 comment by: *Rolls-Royce plc POA*

As an engine manufacturer and after discussion with our DOA - we are unified in the position that all our components as designed will require an EASA Form 1 except for exsiting COTS (Commercial off the Shelf parts and standard parts). Hence from our view these categories are irrelevant.

response **Refer to Section 1**

comment 370 comment by: *IATA*

Existing Text	Comment / Proposed Text	Justification
GM 21.A.308 Criticality levels (CLs) for new parts and appliances to be installed during maintenance	GM 21.A.308 (a) Criticality levels (CLs) for new parts and appliances to be installed during maintenance	Numbering typo/omission?

response **Refer to Section 1**

comment 372 ❖ comment by: *HEICO Aerospace*

HEICO Comment 1 – Criticality Level - Various Locations
 Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”

As appropriate, replace “Critical” with “Safety Sensitive.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.



Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their "Safety Sensitivity" as opposed to their "Criticality."

response **Refer to Section 1**

New GM 21.A.308(b)

p. 14

comment 56 comment by: *TAP Maintenance & Engineering*

It is not clear how a DOA shall use its right to change the CL of a part, without producing any change in the A/C itself (no SB shall be produced). More guidance material should be created.

response **Refer to Section 1**

comment 84 comment by: *René Meier, Europe Air Sports*

GM 21.A.308(b) Lower and higher Criticality Levels
p 14/32
2nd text block

The provision that the design holder has the right a lower Criticality Level in accordance with the assessment mentioned is supported.

The Agency writes: "Reassigning to a part or appliance a CL other than that assigned during the initial design should be considered a design change, in accordance with Subpart D".

Rationale and question:

Uncertainty, and a resulting question: We do not fully understand the implications of 'design change' (for example, does this mean STC action?)an we question question why it should apply. For simple changes to component specification standards and/or data, why should this be considered being a design change?

response **Refer to Section 1**

comment 133 comment by: *Fédération Française Aéronautique*

GM 308 (b)

A design holder who decides to assign a lower CL to the CL that would have been assigned when assessed in accordance with the criteria in 21.A.308 (a), CL II, II or IV has a real technical reason that he can justify.



	So, to consider a reassignment to a part or appliance with a CL other than that assigned during the initial design is a design change allows the Agency to appreciate the relevance of the choice made by the design older.
response	Refer to Section 1
comment	158 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> What is the effect in service (e.g. storages) after the TC Holder has changed the CL? Invalidation of parts?
response	Refer to Section 1
comment	181 comment by: <i>EHA</i> GM 21.A.308(b), confusing statement “lower CL” clashes with the example they provide. I think they mean “Higher criticality”. Cross CAA equivalency: How will these new CL’s relate to new parts originating from other countries? Does something like 21.A.308 (d) apply (Page 9)? Part 145.A.42 may need additional clarification for parts not manufactured in the EU.
response	Refer to Section 1
comment	220 comment by: <i>Lee Carslake</i> In regard to the commercial aspects, would EASA expect Type Certificate Holders to conduct criticality assessments on all current type certificates currently issued should the requirements be published, or would the onus be on the Operator through the CAMO to request such action by the TCH? A TCH may be unwilling to support criticality classification if the the EASA fleet is small and ageing.
response	Refer to Section 1
comment	226 comment by: <i>British Airways Engineering</i> Higher – lower anomaly. Please see our comment at 21.A.309
response	Refer to Section 1
comment	276 comment by: <i>AIRBUS</i> 1. PARAGRAPH / SECTION : NPA 2017-19, page 14/32, point GM 21.A.308(b) 2. PROPOSED TEXT / COMMENT : It is proposed to delete this GM. 3. RATIONALE / REASON :



This text should be adapted and introduced in the Certification Specifications. It will ensure consistency in the establishment of the list of parts and appliances not requiring the issue of an EASA Form 1 and of the related manufacturing and release standards with the qualitative and/or quantitative objectives specified in the certification specifications used to develop certification bases.

response **Refer to Section 1**

comment

372 ❖

comment by: *HEICO Aerospace*

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”

As appropriate, replace “Critical” with “Safety Sensitive.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

comment

405

comment by: *Aviation Suppliers Association*

This GM explains that “[t]he design holder has the right to assign a lower CL than the CL that would have been assigned when assessed in accordance with the criteria in 21.A.308(a). This means to assign CL I to a part or appliance to which, when assessed in accordance with 21.A.308(a), CL II, III or IV would have been assigned, and so on. This is the prerogative of the design holder whose design contains such part or appliance at the time of obtaining the design approval.”

This GM illustrates a flaw in the numbering system of the CLs. A “lower” CL is numerically lower, but it is actually a higher level of criticality, a higher level of scrutiny, and a higher level of documentation requirement. In light of the fact that the GM specifies that the highest CL is considered a “lower” CL because it is numerically lower, there is an obvious confusion that could arise in the future.

We recommend inverting the numerical order of 21.A.308, in order to ensure that the highest levels of “criticality” also get the highest numbers. This will reduce



confusion associated with references to numerically lower CLs that are actually higher criticality levels.

response **Refer to Section 1**

comment 425 comment by: MARPA

This GM explains that "[t]he design holder has the right to assign a lower CL than the CL that would have been assigned when assessed in accordance with the criteria in 21.A.308(a). This means to assign CL I to a part or appliance to which, when assessed in accordance with 21.A.308(a), CL II, III or IV would have been assigned, and so on. This is the prerogative of the design holder whose design contains such part or appliance at the time of obtaining the design approval."

This GM illustrates a flaw in the numbering system of the CLs. A "lower" CL is numerically lower, but it is actually a higher level of criticality, a higher level of scrutiny, and a higher level of documentation requirement. In light of the fact that the GM specifies that the highest CL is considered a "lower" CL because it is numerically lower, there is an obvious confusion that could arise in the future.

We recommend inverting the numerical order of 21.A.308, in order to ensure that the highest levels of "criticality" also get the highest numbers. This will reduce confusion associated with references to numerically lower CLs that are actually higher criticality levels.

response **Refer to Section 1**

New GM 21.A.308(c)

p. 15

comment 277 comment by: AIRBUS

1. PARAGRAPH / SECTION :
NPA 2017-19, page 15/32, point GM 21.A.308(c)

2. PROPOSED TEXT / COMMENT :
It is proposed to delete this GM.

3. RATIONALE / REASON :
Data should be made available as part of instructions for continued airworthiness in order to ease treatment by CAMO (point M.A.401(b)) and AMO (point 145.A.45(b)). Point 21.A.61 refers.

response **Refer to Section 1**

comment 342 comment by: Leonardo Helicopters

It is strongly suggested to avoid the word "list" as the only requirement needed is the evidence of the CL for the part or appliance. So the sentence "to use the CL list in relation..." should be replaced with "to use the CL in relation..."



response **Refer to Section 1**

comment 372 ❖ comment by: *HEICO Aerospace*

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”

As appropriate, replace “Critical” with “Safety Sensitive.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

comment 408 comment by: *Aviation Suppliers Association*

This GM identifies maintenance personnel as those who are interested persons with respect to CL lists. However, distributors and others will also need access to these lists. The reason for this is because distributors are responsible for ensuring correct documentnation in order to make the parts usable to the installer-customer. If distributors do not get access to CL lists/parts lists, then we run the risk that they will sell parts without the right documentation, which will unnecessarily complicate installation for non-safety reasons.

We recommend that the GM identify parts sellers/distributors as interested persons with respect to CL lists, and ensure that they have access to these lists. Pertinent language is proposed to be added to 21.A.61 (see the relevant comment, above).

response **Refer to Section 1**

comment 428 comment by: *MARPA*

This GM identifies maintenance personnel and manufacturers as those who are interested persons with respect to CL lists. However, the language uses the permissive "may" with respect to the design approval holder's obligation to allow product owners to make available the CL to interested persons. The provision reads



in part, "the design holder may grant permission to the owner of the product to distribute the current CL list to such organisations/persons."

We have seen repeatedly in past instances, even with respect to information that is regulatorily required to be provided, certain certificate holders refuse to provide that information to parties entitled to it. This has typically been done for commercial reasons cloaked in the nebulous and often legally specious language of "proprietary" information. If interested persons are not granted access to CL lists/parts lists, then we run the risk that parts could be sold without the right documentation, or only parties with access to the CLs will be able to provide the appropriate documentation and thus charge monopolistic prices, which will unnecessarily complicate the obtaining and installation of parts for non-safety reasons.

We recommend that the permissive word "may" be changed to the mandatory word "must" to ensure that product owners are permitted to provide CLs to interested persons without having to agree to additional licensing or other consideration. Further, we recommended that EASA develop a database, accessible through the EASA website, to make publicly available all CLs so that interested parties may access the information without being forced into unnecessary agreements to obtain data that should be publicly available in the interests of safety.

response [Refer to Section 1](#)

New GM 21.A.308(d)

p. 15

comment 85 comment by: *René Meier, Europe Air Sports*
 GM 21.A.308(d)
 p 15/32
 3rd text block
 second alinea

Question: What is "a small European fleet"? Will this figure be a relative or an absolute one, will it depend on the size of the total fleet of the aircraft type concerned?

response [Refer to Section 1](#)

comment 159 comment by: *Rolls-Royce Deutschland / DOA Manager D. Stege*
 That GM should become the Part-21 requirement and the only rule. Take the TC Holder out. It would ease and centralise the subject and it could even co-exist with the US approach.

response [Refer to Section 1](#)

comment 278 comment by: *AIRBUS*
1. PARAGRAPH / SECTION :
 NPA 2017-19, page 15/32, GM 21.A.308(d)



2. PROPOSED TEXT / COMMENT :

It is proposed to amend the GM 21.A.308(d) to read:

“GM 21.A.308(~~db~~) ~~Default assignment of criticality levels (CLs) and CLs assigned~~ **Parts and appliances not requiring the issue of an EASA Form 1 and the related manufacturing and release standards – Empty/No list and list issued** by the Agency considering the operational need

Unless the design holder decides to assess in accordance with 21.A.308(a) the parts and appliances ~~to assign CLs~~, the parts and appliances will need to be manufactured under Part 21 manufacturing provisions that permit the issue of an EASA Form 1.

Alternatively and upon request of a third party, the Agency may decide, on a case-by-case basis and considering the operational need, to ~~assign CLs to list~~ parts and appliances belonging to a design which is in compliance with Part 21 **that do not require the issue of an EASA Form 1 and the related manufacturing and release standards.**

The Agency’s decision would cover cases such as:

- aircraft for which the type certificate has been surrendered and for which no production organisation approved under Part-21 is available to manufacture new parts and appliances to be used ~~during maintenance under Regulation (EU) No 1321/2014~~; or
- other than complex motor-powered aircraft (and engines or propellers mounted on them) with a small European fleet, for which the design holder and/or the production of new parts and appliances is/are located outside EU.”

3. RATIONALE / REASON :

For sake of consistency with amendments proposed for the paragraph (d) of point 21.A.308.

response **Refer to Section 1**

comment 378 comment by: *Embraer S.A.*

While EASA gives examples of cases when the agency could assign a different CL for parts and appliances, there is no clear and broad definition of when EASA will apply this classification. Therefore, even considering that we agree with the examples, we consider that the inclusion of a definition will be useful to define when the rule will be applicable.

response **Refer to Section 1**

comment 393 comment by: *Aviation Suppliers Association*

response **Refer to Section 1**

comment 418 comment by: *PPL/IR Europe*

It is essential for proportionality in General Aviation that the Agency assigns criticality levels, not only to individual parts on a case-by-case basis, but also to classes of parts for GA aircraft. The GA fleet is ageing and typically poorly supported by DAHs.



It may not be in the commercial interests of the holder of a TC or STC to assign criticality levels higher than CL I, even though there is no safety case for assigning CL I. Based on the criteria in 21.A.308, it should be efficient for the Agency to classify criticality by categories of parts using generic criteria, as it has started to do with AMC 21.A.308(a). A DAH should be permitted to put a safety case for assigning a lower criticality level where necessary.

response **Refer to Section 1**

comment 448 comment by: *Safran Cabin Germany GmbH DOA 21J.067*

GM 21.A.308(d) should be clearly limited to cases as specified and where the Design Approval Holder is no more available.
In addition it should be stipulated that the final decision should be always under ultimate responsibility of the Design Approval Holder and not EASA since the DAH stays liable for continued airworthiness.

response **Refer to Section 1**

New AMC 21.A.308(a)

p. 15-16

comment 86 comment by: *René Meier, Europe Air Sports*

AMC 21.A.308(a) Parts and appliances with assigned Criticality Level IV for sailplanes
p 15/32

1st text block

2nd text block

p 16/32

1st text block

Remark:

This text (amended to cover the CL concept) has been inserted here and removed from Part-M AMC MA501(c) – see page 17. As the equipment under discussion here is normally installed during maintenance according to owner's evolving choices and instructions. Therefore it is unclear to this reviewer why it has been removed from the maintenance code to the Initial Airworthiness code.

Question:

What are the implications in regulatory terms.

2nd text block page 16/32

Remark:

Second point: – 'Required' equipment for operating regulations. The key issue here is not with production or installation standards but with power supply. In a sailplane all these equipments are, perforce, powered by commercial standard batteries. These are generally only qualified to commercial standards seen to equate to CL III, usually backed up by reversionary circuitry.

response **Refer to Section 1**



comment

348

comment by: *European Sailplane Manufacturers*

It is appreciated by the sailplane manufacturers that the already proven and well appreciated flexibility of current “sailplane standard parts” is retained and it is understood that this is now moved to this new 21.A.308(a) paragraph.

It is also understood and accepted that now these parts shall not longer be considered to be “standard parts” but parts of the least critical CL (i.e. CL IV as defined in this NPA).

Nevertheless, the simple “copy & paste” done to move the wording to the new location in the AMC creates now some changes in the interpretation of the AMC which we consider to be unintended and possibly wrong (= changing the intent of the AMC against the current situation).

Therefore we propose:

In the third paragraph “Examples of equipment that can be assigned CL IV are...” should be now changed towards “Examples of equipment which shall be assigned a CL IV are...” to make clear that this is an automatic assignment of CL IV for such sailplane parts.

In the fourth paragraph “Equipment that must be approved cannot be assigned CL IV” should now be changed towards “Equipment that must be approved shall not be automatically assigned CL IV” to make clear that still such an assignment might be still possible (if the design holders considers and demonstrates it to be not as critical) but requires in such a case action by the design holder.

Justification:

In the current situation, the TC holder of the aircraft has no need to classify a part as "sailplane standard part". This very much makes sense as the sailplane manufacturers (= TC holders) would be overwhelmed if they had the obligation to decide what such a part should be aor even trigger some sort of classification.

This situation should not be changed by transferring the process into the new AMC 21.A.308(a).

response

Refer to Section 1

comment

349

comment by: *European Sailplane Manufacturers*

In addition to the automatic assignment of a low (i.e. CL IV) criticality level to the parts known since 2006 as “sailplane standard parts”, the sailplane manufacturers propose to allow an easier assignment of non-required and non-critical parts to CL IV for other simple and light aircraft (= non-sailplanes) as well.

ELA 1 aircraft (or even ELA 2) are certainly not much more complicated than sailplanes and would certainly also profit from use of devices as e.g. bank/slip indicators ball type, navigation computers, data logger and anti-collision systems. Requiring the aircraft manufacturer (TC holders) of such non-sailplanes to reassign the CL in each case using the procedures of a change might be too cumbersome.



Perhaps EASA could find a simpler process like allowing a process where the aircraft manufacturer (TC holder) might just designate or declare such a reassignment of a criticality level – this would still allow EASA to take measures to preclude such a reassignment but also would make the whole process much simpler and less burdensome for EASA and the TC holder.

If this is not possible, then it should at least be allowed that the change approval needed for the reassignment could contain many different parts, for which the manufacturer (TC holder) wants to define another criticality level.

response **Refer to Section 1**

comment

372 ❖

comment by: HEICO Aerospace

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.”

As appropriate, replace “Critical” with “Safety Sensitive.”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion.

Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

comment

417

comment by: PPL/IR Europe

It is appropriate to move this alleviation from the "standard parts" rule, and to consider no-hazard parts as CL IV.

However, it is disproportionate and inconsistent to restrict this alleviation to sailplanes (for which it has worked successfully and safely for a decade).

Proposal

AMC21.A.308(a) Parts and appliances with assigned criticality level (CL) IV **for ELA 1 and ELA 2**

In the case of **ELA 1 and ELA2 aircraft**, non-required instruments and/or equipment **which certified under CS 22.1301(b)**, if those instruments or equipment, when



installed, functioning, functioning improperly or not functioning at all, do not in themselves, or by their effect upon the ~~sailplane~~ aircraft and its operation, constitute a safety hazard, they shall be considered as being assigned CL IV.

response [Refer to Section 1](#)

New AMC 21.A.309

p. 16

comment 17 comment by: Yuksel Kenaroglu

"ISO 9001 is considered...": What is the contribution of this statement in here ? It may be removed.

response [Refer to Section 1](#)

comment 58 comment by: TAP Maintenance & Engineering

Part 145 should also be considered as a standard as they can already manufacture in accordance to 145.A.42 c) small items. This should be revised to allow MRO the right to produce CL II to CL IV parts.

response [Refer to Section 1](#)

comment 61 comment by: AIR FRANCE / ZYLAWSKI Christine

[AMC 21.A.309 "Manufacturing standards and release requirements for new parts and appliances to be installed during maintenance"](#)

o "A CoC conforming to EN 10204 ot ATA 106 is considered adequate to release parts and appliances that have been assigned CL II". What about CoC for CL III parts ?

response [Refer to Section 1](#)

comment 116 comment by: ENAC

Not agree with the proposal of using a CofC as release documents for part and appliances classified as CL II, for which the definition of the criticality includes a potential impact on safety margin.

A certificate of conformity may be issued only for CL III and CL IV.

response [Refer to Section 1](#)

comment 214 comment by: Laurent Lalaque

The manufacturing precautions on the parts classified CL II must not be relaxed, and an EASA Form 1 must be required for those parts. Indeed, it is recognized in Part 21 GM21.A.38(b) "Unsafe condition" Note 4, that if the parts which would be classified CL II, would fail too frequently, there may be an unsafe condition. Anyway, a possible increase of failures leading to physical distress to passengers, would affect



significantly the airworthiness of the products. Moreover, the requirement for CL II parts in the NPA says "the part is released by the manufacturer identified in the design data": can you clarify this wording, if the intent is to prevent any manufacturer not identified in the design data to release the part? The manufacturing standards on the parts classified CL III shall be those required in the proposed text for the parts CL II, i.e. the manufacturing source shall meet a quality management standard recognised by the aviation industry, or the automotive industry. Indeed, the failure of the parts CL III has an effect on the safety of the product, as defined by proposed paragraph 21.A.308. In addition, the release of the parts class III shall be only permitted on condition, that the manufacturer provides evidence of an adequate reliability of the part, to the satisfaction of the authority. The manufacturing standards on the parts classified CL IV shall be those required in the text for the parts CL III, i.e. the manufacturing source shall meet a quality management standard recognised by the manufacturing industry. Indeed, there would be otherwise absolutely no requirement on the conformity of the part, and the effect of any possible non conformity of the part cannot be predicted on highly integrated product such as aircraft engines. Therefore, the proposed NPA would affect the airworthiness of the product for the parts classified CL IV.

response **Refer to Section 1**

comment 218 comment by: *Lee Carslake*

ISO 9001 is a general quality management system, which is not specific to production. Aerospace production quality standards are better covered under EN/AS9100. ISO 9001 does not directly require for instance first article inspection, whereas EN/AS9100 specifies the requirement within the standard.

Please consider ISO 9001 QMS being limited to CL 4 only on the basis that this is a general QMS standard and its use should only be considered for parts not considered safety related.

response **Refer to Section 1**

comment 227 comment by: *British Airways Engineering*

This should also include ISO 9002 standard for production organisations without design approval.

response **Refer to Section 1**

comment 279 comment by: *AIRBUS*

1. PARAGRAPH / SECTION :
NPA 2017-19, page 16/32, AMC 21.A.309

2. PROPOSED TEXT / COMMENT :
It is proposed to amend the AMC 21.A.309 to read:



“AMC1 21.A.3098(a) Manufacturing standards and release requirements for new parts and appliances to be installed during maintenance under Regulation (EU) No 1321/2014

In respect of 21.A.3098:

— EN/AS/JAS 9100 is considered a quality management system standard recognised by the aviation industry as suitable for manufacturing;

— ISO 9001 is considered a quality management system standard recognised by the manufacturing industry.

— a Certificate of Conformity (CoFC) conforming to EN 10204 or ATA 106 is considered adequate to release parts and appliances that have been assigned CL II whose failure is potentially Major.

— ISO 9001 is considered a quality management system standard recognised by the manufacturing industry.”

This AMC refers to quality standards without specifying how the manufacturing source compliance is to be demonstrated.

It is unclear why the wordings used for EN/AS/JAS 9100 and ISO 9001 are different. It would be useful to specify how the regulator intends to manage industry standards (is the above list exhaustive, acceptance/rejection of their evolutions, oversight of Standard Making Organisation activities, etc.). Will SMO need to demonstrate that their standard provide a minimum level of safety at least equivalent to Part-21 Subpart G?

3. RATIONALE / REASON :

An EASA Form 1 for a new item certifies that this item (i) complies with a technical specification, and (ii) has been made by an organisation deploying a manufacturing process the competent authority has approved and can audit.

There is a number of industry standards that may be used to deploy quality assurance. But it may not be necessarily sufficient to ensure the certification that the items produced comply with the relevant technical specification (as an example, ref. AMC M.A.501(c) for requirements on standard parts).

Existing production requirements of the Part-21 set the standards. An acceptable industry standard should ensure that (i) each item, like any other sister one, has been manufactured in accordance with an approved and invariable process and (ii) there is a declaration that the item complies with the approved design data, and therefore is serviceable/airworthy.

Mixing the compliance with a QMS standard and the compliance with TC requirements for CL II and CL III may not permit to ensure an uniform level of safety, and does not allow to identify the certification baseline for the new parts and appliances, whereas the used ones will still continue to have requirements for the certification of their maintenance, as defined in Regulation (EU) No 1321/2014.

The number of different forms/templates of CoC conforming to accepted industry standards (there are probably some other than those listed above that are acceptable) may create in the end quite a huge burden on AMO for component acceptance.

response **Refer to Section 1**

comment 280

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 16/32, AMC 21.A.309



2. PROPOSED TEXT / COMMENT :

Manufacturers of parts for which an EASA Form 1 is not sought will not be required to comply with Part-21 requirements, but with an industry standard.

This raises the question whether an acceptable industry standard is one that includes a requirement for coordination between production and design through an appropriate arrangement.

3. RATIONALE / REASON :

Point 21.A.122 and point 21.A.133 require from the production organisation to ensure satisfactory coordination between production and design, through an appropriate arrangement with the applicant for, or holder of, an approval of such a design.

These points will no longer apply in the case of manufacturers complying with an industry standard.

response **Refer to Section 1**

comment

371

comment by: IATA

Existing Text	Comment / Proposed Text	Justification
AMC 21.A.309 ...	TBD	Please explain if and how should the wording in 21.A.309 be differently perceived when stating “the manufacturing source meets a quality management system standard recognised by the aviation industry as suitable for manufacturing” from the one stating that “the manufacturing source meets a quality management system standard recognised by the manufacturing industry.” Does the AMC 21.A.309 indicate the rationale to be applied in the first case above, the second one or both?

response **Refer to Section 1**

Proposed amendments to AMC/GM to Part-M – AMC M.A.501(a)

p. 16

comment

112

comment by: FNAM

ISSUE

In 2017, FNAM and GIPAG called for more privileges for PART-145 General Aviation organizations than independent PART-66 staff through a letter addressed to Patrick KY. One of the required privileges is:



« An Approved Maintenance Organization shall be authorized to establish an EASA form 1 for a component for which are available:

- 8130-3 form (FAA); or
- 24-0078 TCCA; or
- TCCA non-dual form

(Limited to non-critical components and within the scope of work of the approval of Approved Maintenance Organization)»

NPA 2017-19 answers approximatively to FNAM and GIPAG's request but FNAM and GIPAG welcome EASA's efforts to provide more flexibility for airworthiness requirements. A clarification is needed for EASA Form 1 equivalence. Indeed, the current AMC 145.A.42(a) describes equivalent documents to an EASA Form 1:

- Possibility to take benefit of bilateral agreement (no additional precision)
- Possibility to transform previous JAA certificates (list of approved JAA certificates)

US equivalents are explained in a FAQ on EASA's website. It is quite difficult to have the exact list of equivalent for other current bilateral agreements. A list of equivalent of EASA Form 1 should be clearly provided by EASA. Even if AMC 145.A.42(a) is brief, since it is the only regulatory text which provides information on equivalent documents for EASA Form 1, it should not be suppressed.

PROPOSAL

Provide in GM a website where the bilateral agreements are updated and, therefore, provide the list of the current equivalent for an EASA Form 1.
Keep the AMC 145.A.42(a)

response **Refer to Section 1**

comment

126

comment by: *Luftfahrt-Bundesamt*

The purpose for the EASA Form 1 in maintenance is the release for all components (not only CL I).

LBA-Justification: EASA Form 1 is used to release all maintenance on components. Not only those assigned CL I. Also for installation of used components only EASA Form 1 release is acceptable from third parties (see 145.A.42(b)).

response **Refer to Section 1**

comment 205

comment by: *EHA*



response

Refer to Section 1

comment

281

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 16/32, AMC M.A.501(a)

2. PROPOSED TEXT / COMMENT :

It is proposed to amend the AMC M.A.501(a) to read:

“AMC M.A.501(a) Installation of components

[...]

3. The following list, though not exhaustive, contains typical checks to be performed:

[...]

(e) verify that the release certificate accompanying each new part satisfies the release requirements established in ~~point 21.A.309 taking into consideration the criticality level (CL) of the part as assigned in 21.A.308~~ the instructions for **continued airworthiness** for the particular product where the part is being installed.

4. The purpose of the EASA Form 1 (see also Part-M Appendix II) is to release **certain** components ~~with assigned CL I (see Part 21)~~ after manufacture and to ~~release~~ **certify** maintenance work carried out on **such** components under the approval of a competent authority and to allow components removed from one aircraft/component to be fitted to another aircraft/component.

5. [...]”

3. RATIONALE / REASON :

For sake of consistency with the AMC M.A.501(b) and the amendments proposed for the paragraph (a) of point M.A.501.

With regard to the paragraph 4., ‘such’ has been crossed-out because currently all component maintenance (not only for those with assigned CL I) must be certified using an EASA Form 1. But we do not see the reason(s) why a spare component manufactured by an organisation not holding a POA would require to be maintained only by organisations holding a MOA. Why would a maintenance organisation not holding a MOA be not enough?

response

Refer to Section 1

comment

372 ❖

comment by: HEICO Aerospace

HEICO Comment 1 – Criticality Level - Various Locations

Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “**Criticality** Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.

Suggested Resolutions: As appropriate, replace “**Criticality** Level” with “**Category** Level.”

As appropriate, replace “**Critical**” with “**Safety Sensitive.**”

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning



all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion. Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response [Refer to Section 1](#)

comment 449 comment by: *Safran Cabin Germany GmbH DOA 21J.067*

Please ensure consistent wording, i.e. parts and appliances instead of component or equipment.

response [Refer to Section 1](#)

AMC M.A.501(b)

p. 17

comment 87 comment by: *René Meier, Europe Air Sports*

AMC M.A.501(b)
p 17/32
1.-3.

While, in due course, it is likely to be removed from Part-M, it seems reasonable to assume it will be retained in Part-M Light as PML will be the sole code relevant to sport sailplanes.

Remark:

However this is a decision to be made by GATF2 when it (eventually) debates PML AMC/GM. Please confirm that this is EASA’s expect course of action.

response [Refer to Section 1](#)

comment 90 comment by: *René Meier, Europe Air Sports*

AMC M.A.501(b)
p 17/32

Question, to be 100% sure: Do these provisions include sailplanes and powered sailplanes?

response [Refer to Section 1](#)

comment 182 comment by: *EHA*

response [Refer to Section 1](#)



comment

282

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 17/32, AMC M.A.501(b)

2. PROPOSED TEXT / COMMENT :

It is proposed to amend the AMC M.A.501(b) to read:

“AMC M.A.501(b) Installation of components

1. The EASA Form 1 identifies the airworthiness status of ~~an~~ certain aircraft components **or certifies the maintenance accomplished on aircraft components**. Block 12 ‘Remarks’ on the EASA Form 1 in some cases contains vital airworthiness-related information (see also Part-M Appendix II) which may need appropriate and necessary actions.

2. The fitment of replacement components should only take place when the person referred to in M.A.801 or the ~~Part-M~~ ~~M.A.~~ Subpart F or Part-145 maintenance organisation is satisfied that such components meet required standards in respect of manufacture or maintenance, as appropriate.

3. The person referred to under M.A.801 or the ~~M.A.~~ Part-M Subpart F or Part-145 approved maintenance organisation should be satisfied that the component in question meets the approved **configuration** data/standard, such as the required design and modification/**repair** standards. This may be accomplished by reference to the (S)TC holder or manufacturer’s parts catalogue or other approved data (~~i.e.~~ Service Bulletins, **Structural Repair Manual, Repair Design Approval Sheets**). Care should also be taken in ensuring compliance with applicable AD, **and any applicable mandatory instruction and associated airworthiness limitation(s) the status of any service life limited parts fitted to the aircraft component as well as the applicable Critical Design Configuration Control Limitations (CDCCL).**”

3. RATIONALE / REASON :

The paragraph 1. is amended to clearly separate the cases of new and used components. But we do not see the reason(s) why a spare component manufactured by an organisation not holding a POA (no EASA Form 1) would require to be maintained only by organisations holding a MOA (EASA Form 1). Why would a maintenance organisation not holding a MOA be not enough (no EASA Form 1)?

The paragraph 3. is amended to add the term ‘configuration’ like in the point M.A.501(b) and to show that Service Bulletins are not the only approved data that may be necessary.

Finally, the wording “mandatory instruction and associated airworthiness limitation” found in the Appendix 1 to Opinion No 13/2016 — CRD to NPA 2014-04 has been introduced to avoid specific emphasis on CDCCL. Such emphasis put on CDCCL may give the impression to readers that the other mandatory instructions and airworthiness limitations are less important (as commented in the frame of the NPA 2013-01). The proposal is to restore the balance.

response

Refer to Section 1

comment

429

comment by: *European Helicopter Association (EHA)*

reference to AMC M.A.501(b), item 3: how is compliance with the added statement (re: CDCCL) proven?



response [Refer to Section 1](#)

comment 450 comment by: *Safran Cabin Germany GmbH DOA 21J.067*
Please ensure consistent wording, i.e. parts and appliances instead of component or equipment.

response [Refer to Section 1](#)

AMC M.A.501(c)

p. 17

comment 62 comment by: *AIR FRANCE / ZYLAWSKI Christine*
[AMC MA501\(c\) "Standard Parts"](#)
o What CL could be associated to current standard parts ?

response [Refer to Section 1](#)

comment 88 comment by: *René Meier, Europe Air Sports*
AMC M.A.501 (c)
p 17/32
1.
We think ASTM should be added to the list proposed at the end of this text block.
Rationale
Many of us are familiar with this institution and its fields of activities.

response [Refer to Section 1](#)

comment 283 comment by: *AIRBUS*
1. PARAGRAPH / SECTION :
NPA 2017-19, page 17/32, AMC M.A.501(c)
2. PROPOSED TEXT / COMMENT :
It is proposed to add "in this context" at the beginning of the definition of standard parts.
3. RATIONALE / REASON :
For consistency with AMC 21.A.303(c) wording.

response [Refer to Section 1](#)

comment 437 comment by: *ARSA*
ARSA suggests that the following point be revised as shown in red text.



AMC M.A.501(c) Installation

1. Standard parts are:

(a) parts manufactured in complete compliance with an established industry, Agency, competent authority or other Government specification which includes design, manufacturing, test and acceptance criteria, and uniform identification requirements. The specification should include all information necessary to produce and verify conformity of the part. It should be published so that any party may manufacture the part. Examples of specifications are National Aerospace Standards (NAS), Army-Navy Aeronautical Standard (AN), Society of Automotive Engineers (SAE), SAE Sematec, Joint Electron Device Engineering Council, Joint Electron Tube Engineering Council, and American National Standards Institute (ANSI), EN Specifications etc.

(b) For sailplanes and powered sailplanes, non-required instruments and/or equipment certified under the provision of CS 22.1301(b), if those instruments or equipment, when installed, functioning, functioning improperly or not functioning at all, do not in itself, or by its effect upon the sailplane and its operation, constitute a safety hazard.

'Required' in the term 'non-required' as used above means required by the applicable airworthiness code (CS 22.1303, 22.1305 and 22.1307) or required by the relevant operating regulations and the applicable Rules of the Air or as required by Air Traffic Management (e.g. a transponder in certain controlled airspace). Examples of equipment which can be considered standard parts are electrical variometers, bank/slip indicators ball type, total energy probes, capacity bottles (for variometers), final glide calculators, navigation computers, data logger / barograph / turnpoint camera, bug-wipers and anti-collision systems. Equipment which must be approved in accordance to the airworthiness code shall comply with the applicable ETSO or equivalent and is not considered a standard part (e.g. oxygen equipment).

2. To designate a part as a standard part the TC holder may issue a standard parts manual accepted by the competent authority of original TC holder or may make reference in the parts catalogue to a national/international specification (such as a standard diode/capacitor etc.) not being an aviation only specification for the particular part.

3. Documentation accompanying standard parts should clearly relate to the particular parts and contain a conformity statement plus both the manufacturing and supplier source. Some material is subject to special conditions such as storage condition or life limitation etc. and this should be included on the documentation and / or material packaging.

4. An [EASA Form 1](#) or equivalent is not normally issued for standard parts **and manufacturer's standards not meeting the Agency's definition of standard part**, and therefore none should be expected.

5. Commercial-off-the-shelf parts are those that:



(a) are not standard parts or parts fabricated during maintenance,
 (b) are not manufactured specifically for aviation use,
 (c) are marked by the manufacturer of the part,
 (d) are traceable to an approved design or maintenance data (e.g., drawings, specifications, Instructions for Continued Airworthiness, Component Maintenance and Overhaul Manuals, Illustrated Parts Catalogue, Illustrated Parts List, Illustrated Provisioning Documents or other data approved by the Agency.)

6. An EASA Form 1, equivalent or other document issued under part 21, subpart F or subpart G is not normally issued for commercial-off-the-shelf parts and therefore none should be expected.

response [Refer to Section 1](#)

AMC M.A.801

p. 18

comment 89 comment by: René Meier, Europe Air Sports

AMC M.A.801 Aircraft certificate of release to service after embodiment of a Standard Change or a Standard Repair (SC/SR)
 p 18/32

Question: Will future Part-M light contain a similar text?

response [Refer to Section 1](#)

New GM M.A.501(f)

p. 18

comment 91 comment by: René Meier, Europe Air Sports

GM M.A.501(f) Equipment exempted from an airworthiness approval in Commission Regulation (EU) No 965/2012
 p 18/32

Question: Will future Part-M light contain a similar text?

response [Refer to Section 1](#)

comment 284 comment by: AIRBUS

1. PARAGRAPH / SECTION :
 NPA 2017-19, page 18/32, GM M.A.501(f)

2. PROPOSED TEXT / COMMENT :
 It is proposed to delete the GM M.A.501(f).



response

3. RATIONALE / REASON :

For sake of consistency with amendments proposed for the paragraph (f) of the point M.A.501.

[Refer to Section 1](#)

New GM 145.A.42(d)

p. 18

comment

200

comment by: *Airlines for Europe (A4E)***Comment:**

same comment as under 3.1.3 / 145.A.42(d), and even the references are not consistent/complete, e.g. CAT.IDE.A.100(b), CAT.IDE.H.100(b) (maybe others) are missing which leaves the list of exempted equipment incomplete.

response

[Refer to Section 1](#)

comment

285

comment by: *AIRBUS***1. PARAGRAPH / SECTION :**

NPA 2017-19, page 18/32, GM 145.A.42(d)

2. PROPOSED TEXT / COMMENT :

It is proposed to delete the GM 145.A.42(d).

3. RATIONALE / REASON :

For sake of consistency with amendments proposed for the paragraph (d) of the point 145.A.42.

response

[Refer to Section 1](#)

comment

325

comment by: *SAFRAN TRANSMISSION SYSTEMS*

New GM 145.A.42(d) is added as follows:

‘

GM 145.A.42(d) Equipment exempted from an airworthiness approval in Commission Regulation (EU) No 965/2012.

The equipment exempted from an airworthiness approval in Commission Regulation (EU) No 965/2012 that can be installed on an aircraft under Part-145 provisions is the equipment identified in points CAT.IDE.A.100(a), CAT.IDE.H.100(a), NCC.IDE.A.100(b) and (c), NCC.IDE.H.100(b) and (c), NCO.IDE.A.100(b) and (c), NCO.IDE.H.100(b) and (c), NCO.IDE.S.100(b) and (c), NCO.IDE.B.100(b) and (c), SPO.IDE.A.100(b) and (c), SPO.IDE.H.100(b) and (c), SPO.IDE.S.100(b) and (c), SPO.IDE.B.100(b) and (c) of the mentioned regulation.’

Comment23: this chapter does not address all the previous requirements about new parts provided as SUPS or Boggus, or from Government Agencies (excluded from



Part145). Are these requirements removed ? Does this mean an AMO can supply parts from anywhere, betting on a CoC from a broker on the market ?

response

Refer to Section 1

Rationale

p. 19-22

comment

48

comment by: *Royal Netherlands Aviation Organisation*

For (powered) sailplanes I like to suggest that a CL level may also be determined by a PART F, G, 145 organization and individual CS releasing aircraft according M.A. 801. These parties / individuals may document this on workorders and make the documentation part of the aircraft maintenance data. Thus traceability is covered at low cost and we have an effective and practical and safe method of documenting repair procedures, parts and materials used and traceability.

Rationale: For (powered) sailplane manufacturers there is no incentive to spend time(money) in reassessing parts CL's for aircraft that are not in production anymore. The only way TC holders can make any money with these products is by selling parts. Apart from profit by selling parts TC holders only incur cost and time consuming paperwork and procedures. In other words "Minor or Major changes" are not at all desirable because it only adds cost and paperwork and time consuming procedures. Minor and major changes do nothing for safety/ efficiency as most parts and materials (I estimate > more than 90 %) are of the shelf anyway (paint, wood, fabric, glue, glass etc fiber, bearings, rods, steel cables, bolts, nuts etc, glass struts, springs, you name it).

Furthermore there are quite a number of gliders out there of various manufacturers which are extinct. There is then no TC holder to judge CL levels or document these for parts. Of course the competent authority or EASA could step in on case by case basis. However the authorities are busy with other issues and by far too expensive and slow in response to judge a CL for a e.g. a standard bearing used in an undercarriage of a glider or a gasstrut that is a standard washing machine part anyway).

So, please EASA, trust the competence and of PART F, G, 145 and individual certifying staff to make a proper judgement and proper and safe repairs of (powered) sailplanes.

Safety related food for thought: Of 100 incidents with sailplanes more than 90 are caused by pilot error (whatever the root cause), the remaining 10 incidents are for at least 8 cases caused by poor design and perhaps 0 - 1 incidents are caused by improper maintenance or substandard parts. Note: in the current situation substandard parts may be very well supplied by a TC holder including a FROM-1 and an ETSO Compliance statement.....

Other food for thought.... In the case of (powered) sailplanes. Is there a relation between a Form 1 and safety? More important are there any clear, statistical data that substantiate a drop in incidents since the introduction of a Form 1?



For what I can see: Quite a number of component and material suppliers provide the same parts as before the "obligatory Form 1 era" but now they add a piece of paper and charge € 15,- for that piece of paper. So FORM 1 only introduce more cost and more paper but not safety nor efficiency.

So for (powered) sailplanes (non complex, not commercially used) we would welcome a much simpler and much more cost effective system.

We hope EASA keeps up the good work for the owner/operators of sailplanes, clubs, associations, PART M F,G organizations and individual Certifying staff and moves swiftly to simple rules for sailplanes.

Thanks, KNVVL (royal dutch aviation organisation), Subpart gliding, CAMO NL.MG.8065

response **Refer to Section 1**

comment 51 comment by: Lantal

"POA only required for parts with CL I By amending points 21.A.121 and 21.A.131, only new parts with CL I require an EASA Form 1 and have to be produced under Part 21 Subpart F (monitored production without POA) or Subpart G (POA requirements). For parts with other CLs (as assigned by the DAH), the NPA proposes that the organisations manufacturing the part do not hold a POA but other recognition of their manufacturing capability, based on industry standards. The 'manufacturing standards and release requirements for new parts and appliances to be installed during maintenance' is established with the new point 21.A.309".

The other manufacturing industry standards (Non-EASA Part 21) needs to be evaluated carefully either those standards fulfils the requirements / criteria that shall overcome the criticality levels defined under CL II and further on.

response **Refer to Section 1**

comment 52 comment by: Lantal

"Thanks to this approach, the DAH, by using the classification in point 21.A.308, is indirectly deciding which parts have to be manufactured under a POA and which parts do not need such high manufacturing standards and the consequential CA oversight, as it can be the case for many commercial parts, for instance".

Currently Part 21 subpart G, 21.A.165 requires that POA shall be conform to the design data established from a design organisation.



response Either a part requires such high manufacturing standards or low manufacturing standards, in either case production shall be compliant with the design data. It seems to be that manufacturing facilities would get some kind of less responsibility as on the other side it gives more workload to design organisation independent monitoring team.
Refer to Section 1

comment comment by: *TAP Maintenance & Engineering*

57

This is a welcome change as it is believed that DOA associated with an airline shall produce a lot of CL changes, in order to facilitate the purchasing of the parts (not only due to the decrease in the part's price but also because probably a decrease in part's lead time shall occur).

Changes in CL from CL II to CL III or CL IV should be classified as a minor change, as well as from CL III to CL IV. Changes from CL I to other CLs must be evaluated case by case (if the TC Holder decides to follow this rule and assign CL levels to parts). Imagine that the TC Holder does not assign any CL, therefore all parts are considered CL I. It does no make any sense to consider for example a interior placard (fasten seat belts) as CL I. A DOA should immediately be able to classify such interior placard as CL IV (through a minor change).

A DOA should be able t assign CLs to parts being identified in their previously designs.

We welcome this NPA as it will allow other players (from other industries such as the car industry) to enter in the aviation industry, allowing therefore for a better competition with decrease in parts' price and lead time.

It seems that a new part can be cheaper than a maintained part that comes with an EASA F1 from an MRO. As the MRO shall need to comply with all Part 145 requirements and the new part if it is a CL II to CL IV might only come with a CoC from a ISO 9001 company. What is the racional to not allow the MRO also to repair parts classified under CL II to CL IV without the need to release a Form 1?

response Refer to Section 1

comment comment by: *AIR FRANCE / ZYLAWSKI Christine*

64

Rationale

- EASA would like to receive the stakeholders’ feedback on whether the CL assignment should be considered a minor change or, as proposed in this NPA, a major change, and if the latter is the case, whether a privilege should be granted for design organization approvals (DOAs) to assign CLs to parts being identified in their previously approved designs.



o Proposition : If the decision is made by the DAH to lower the CL (CL II becomes CL I) , this should be a minor change (as it is more stringent).
 If decision is made by the DAH to increase the CL (CL I becomes II), this should be a major change (as it is less stringent).

- Stakeholders’ view regarding the need to identify the manufacturer for a part with assigned CL IV
 The responsibility of manufacturer are guaranteed by the identification on the documentation.

- The Agency would like to receive comments from stakeholders regarding the need to retain information regarding the manufacturing standards of the (or some) new parts to be installed during maintenance once the part undergoes workshop maintenance.
 The current process of traceability of life limited part should not be changed, these parts should be considered as CL I.

response **Refer to Section 1**

comment 92 comment by: René Meier, Europe Air Sports

Rationale
 p 19/32
 1st block

Remarks:
 It is confusing that terms are used here I did not find before ("orphan aircraft" is one of them), Furthermore I think the use of the terms "design holder" and "design approval holder" should be clearly defined. An official list of acronyms and abbreviations would help.

Secondly, by what method will EASA maintain stewardship of ‘orphan’ airframes? Orphan aircraft, as they age without a TC holder, become more dependent on substitute parts. For example wooden airframes often require wood specifications that are outdated and/or substituted, they fabricated with commercial parts, even including woodscrews an, balsa wood, and that is even before one talks about engine parts (eg. the VW converted aero engines). Will EASA use a new form, or require STC action? Does EASA really seek or need this job opportunity? Is there not a role here for Qualified Entities or even CAMO/CAO’s?

response **Refer to Section 1**

comment 94 comment by: René Meier, Europe Air Sports

Rationale
 p 19/32
 6th text block

Question:



At what point in the issuance of Part-M, will the transfer proposed from Part-21 to future Part-M (believed to be MA501(a)). materialize? We presume that a similar, although hopefully a proportionate point, will also be introduced into Part-M Light at the same stage?

response **Refer to Section 1**

comment 95 comment by: *René Meier, Europe Air Sports*

Rationale
p 20/32
4th text block

This would seem to be entirely consistent with both the intent of this NPA, and a natural consequence of the measure.

Rationale:
Certainly for non-CAT General Aviation this is in the spirit of 'simpler, lighter, better'.

response **Refer to Section 1**

comment 96 comment by: *René Meier, Europe Air Sports*

Rationale
p 20/32
6th text block
(2)

The implications of the various relocations (in AMC Part-21) and the deletion (from AMC M.A.501c) of the entry on 'Standard Parts' is so far clear to this reviewer. One might assume that the actual location of these terms in Part-21 is immaterial, so there seems little point in pursuing this aspect. However, it is typical that such equipment is fitted during maintenance so a location in AMC Part-M appears logical. Further ELA parts under item (3) and sailplane parts under item (2) will in due course be transferred to Part-M Light, as and when the group is reformed to consider these.



	<p>Question: Can we be reassured that this consistency will be retained in future regulatory development?</p> <p>Furthermore, we propose to replace "glider" by "sailplane/powered sailplane".</p> <p>Rationale: This is what is meant, we think...</p>
response	<p>Refer to Section 1</p>
comment	<p>118 comment by: ENAC</p> <p>1) the CL assignment should be considered a major change; 2) POA should be required for parts and appliances classified as CL I or CL II.</p>
response	<p>Refer to Section 1</p>
comment	<p>160 comment by: Rolls-Royce Deutschland / DOA Manager D. Stege</p> <p>On page 19, EASA asks for 'stakeholder's feedback on whether the CL assignment should be considered a minor change or, as proposed in this NPA, a major change, and if the latter is the case, whether a privilege should be granted for design organisation approvals (DOAs) to assign CLs to parts being identified in their previously approved designs.': Any change to the proposed CLs initially announced would have immediate effects whether POA under Part-21 is required or not. Keeping in mind the commercial and contractual situation in the aviation business, any such change will most likely lead financial impacts and potentially claims. It's not supported nor improving safety to place such burden onto TC holders to improve uncertainty in the operational life phase (i.e. maintenance). This NPA should be cancelled and a revised concept (ref. US concept) defined, which in under the control of the relevant State of Registry in Europe (or outside). If the EASA approved Type Design would contain in future information like CLs it would automatically be subject of TC validations in other countries and subject of acceptance or rejections. If the initial Type Design approved by the State of Design outside EU doesn't contain CL information, would EASA in future stop validating such Type Certificates? The proposed concept could create a big confusion in the manufacturing and logistic chain and definitely creates lost of admin work onto TC Holders in Europe. Therefore, EASA should be the only body defining CLs. No TC holder action or privilege necessary.</p>
response	<p>Refer to Section 1</p>
comment	<p>161 comment by: Rolls-Royce Deutschland / DOA Manager D. Stege</p> <p>On page 20, EASA asks 'to receive comments from stakeholders with regards to difficulties to obtain the proposed marking for parts': To facilitate a situation where parts from TC Holder Design and changed parts under (other) DOA can't be identified on the plate in-service anymore. Is such affect seen as beneficial?</p>

response [Refer to Section 1](#)

comment 201 comment by: Airlines for Europe (A4E)

Paragraph/Headline: Request for stakeholder review, page 19

NPA Text subject to comments (abbreviated as applicable): EASA would like to receive the stakeholders' feedback on whether the CL assignment should be considered a minor change or, as proposed in this NPA, a major change, and if the latter is the case, whether a privilege should be granted for design organisation approvals (DOAs) to assign CLs to parts being identified in their previously approved designs.

Comment:

A4E would prefer to make classification of the CL assignment identical to the classification of the change to the type certificate for installation of that part in to an aircraft. If the installation of a part (on a stand-alone change) would be classified as a major change to the type certificate, then the classification of the CL assignment would also be major. If the installation of a part would be classified as a minor change to the type certificate, then the classification of the of the CL assignment would also be minor.

response [Refer to Section 1](#)

comment 202 comment by: Airlines for Europe (A4E)

Paragraph/Headline: Request for stakeholder comment, page 20

NPA Text subject to comments (abbreviated as applicable):

Stakeholders are also invited to comment on the proposed CL classification (i.e. CL I, II, III and IV) and the corresponding 21.A.309 manufacturing standards and release requirements (e.g. stakeholders' view regarding the need to identify the manufacturer for a part with assigned CL IV).

Comment:

see comment to 3.1.1/21.A.804(a)

response [Refer to Section 1](#)

comment 203 comment by: Airlines for Europe (A4E)

Paragraph/Headline: Request for feedback

Comment:

- EASA would like to receive the stakeholders' feedback on whether the CL assignment should be considered a minor change or, as proposed in this NPA, a major change, and if the latter is the case, whether a privilege should be granted for design organization approvals (DOAs) to assign CLs to parts being identified in their previously approved designs.

Proposition: If the decision is made by the DAH to lower the CL (CL II becomes CL I), this should be a minor change (as it is more stringent). If decision is made by the DAH



to increase the CL (CL I becomes II), this should be a major change (as it is less stringent).

- Stakeholders' view regarding the need to identify the manufacturer for a part with assigned CL IV:

The responsibility of manufacturer are guaranteed by the identification on the documentation.

- The Agency would like to receive comments from stakeholders regarding the need to retain information regarding the manufacturing standards of the (or some) new parts to be installed during maintenance once the part undergoes workshop maintenance:

The current process of traceability of life limited parts should not be changed, these parts should be considered as CL I.

response **Refer to Section 1**

comment 210

comment by: *Ferhan SADIKOGLU*

CL assignment (if in case) shouldn't be left to DOAs even in initial type design. The authority should decide it always. Hence it will become obvious, robust, reliable way of determining CL. It might be like ETSO classification. Being designated by Authority no doubt or argue would arise on CL of the part. Like nobody argue on a component whether it is ETSO classified or not. So, with reference to my other comments, critically levels should be minimised to 2 levels at most and the purpose should be only to allow commercial off the shelf parts to be used easily. All other parts should remain same as requiring Form-1.

In worst case, if the draft amendment is accepted as it is, it will be terrible for the industry. The industry at all, but especially for the production organisations it will be disaster, because of the need for POA may depend on a personal judgment of design holder. Sometimes POA need will be in case and sometimes will not be for the same part, which will make life uncertain.

response **Refer to Section 1**

comment 216

comment by: *Laurent Lalaque*

The parts classified CL II may lead to an unsafe condition if they fail too frequently, according to their definition in proposed paragraph 21.A.308 , and to Part 21 GM21.A.38(b) "Unsafe condition" Note 4, the parts CL II. Therefore, it is not acceptable to relax the requirements on the manufacturers towards the authorities, particularly the point 21.A.165 (f) requiring the manufacturer to report to the TCH and the authorities the deviations to the design data that could lead to unsafe conditions.



response

[Refer to Section 1](#)

comment

286

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 19/32, para. 'Rationale'

2. PROPOSED TEXT / COMMENT :

The EASA indicates in this paragraph that design approval holders may assign CL. It implies that the TC holder, STC holders, and/or holders of a major repair design approval may successively assign a different CL for a given part.

Taken separately, the instruction (i.e. the CL) for each modification or repair embodied on an aircraft should be relatively easy to manage. But with multiple modifications and/or repairs embodied on the same individual aircraft, this situation may become much more complex. In the end, the CL assigned by a design approval holder may be affected due to the effects of interrelationships amongst multiple modifications and/or repairs approved independently that may not be assessed during the approval process.

This raises the question who will be responsible to address these effects of interrelationships in order to provide AMO with unambiguous maintenance data (ref. point 145.A.45) for the acceptance of components.

3. RATIONALE / REASON :

The management of the aircraft configuration is the responsibility of the CAMO. It has to ensure, prior to the embodiment of a new modification or repair, that:

- (i) the data used to modify and/or repair the aircraft, including any component for installation thereto, are in compliance with M.A.304, and;
- (ii) the new modification and/or repair will not conflict with configuration elements that are already embodied, affecting thus the aircraft airworthiness.

It is believed that this NPA does not sufficiently address the CAMO role in the management of CL in case of multiple modifications and/or repairs.

When assessing if aircraft configuration elements interrelate correctly, the CAMO managing the continuing airworthiness of the aircraft should determine the need for assistance by the aircraft type certificate holder or any other approved design organisation holding the appropriate design competencies. This assistance may not be needed, for example, when modifications and repairs have been performed exclusively in accordance with data originating from the aircraft Type Certificate holder.

response

[Refer to Section 1](#)

comment

287

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 19/32, para. 'Rationale'

2. PROPOSED TEXT / COMMENT :

Identification by the design holder of parts that don't need an EASA Form 1 (i.e. identification of the CL):



The EASA indicates in this paragraph that it would like to receive a feedback on whether the CL assignment should be considered a minor change or, as proposed in this NPA, a major change, and if the latter is the case, whether a privilege should be granted for design organisation approvals (DOAs) to assign CLs to parts being identified in their previously approved designs.

Airbus opinion is the following:

The decision to establish or change the list of parts and appliances not requiring the issue of an EASA Form 1 and of the related manufacturing and release standards should constitute a major change.

A privilege should be granted to Approved Design Organisations to establish or change the list of parts and appliances being identified in their previously approved designs.

3. RATIONALE / REASON :

Self-explanatory.

response **Refer to Section 1**

comment

288

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 20/32, para. 'Rationale'

2. PROPOSED TEXT / COMMENT :

Manufacturing of parts and their release for installation during maintenance:

One implication of relaxing the manufacturing requirements for certain parts is that some requirements (e.g. 21.A.133(c) or 21.A.157 or 21.A.165(f)) for the organisations manufacturing under Part 21 would not be applicable to organisations entitled to manufacture parts with assigned CL II, III or IV. The EASA indicates in this paragraph that it would like to receive comments on this aspect.

Airbus opinion:

No opinion other than those already provided.

EASA also invited to comment on the proposed CL classification (i.e. CL I, II, III and IV) and the corresponding 21.A.309 manufacturing standards and release requirements (e.g. stakeholders' view regarding the need to identify the manufacturer for a part with assigned CL IV).

Airbus opinion:

No opinion other than those already provided.

3. RATIONALE / REASON :

Self-explanatory.

response **Refer to Section 1**

comment

289

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 21/32, para. 'Rationale'



2. PROPOSED TEXT / COMMENT :Maintenance of parts and their release for installation during maintenance:

The EASA indicates in this paragraph that it would like to receive comments from stakeholders regarding the need to retain information regarding the manufacturing standards of the (or some) new parts to be installed during maintenance once the part undergoes workshop maintenance.

Airbus opinion is the following:

The record-keeping requirements for CAMO and AMO have been reviewed and commented in the frame of the RMT.0276 – NPA 2014-04. The outcome should provide, if the Opinion is eventually adopted, proportionality depending on the nature of the maintenance required for the parts and appliances. Most of the time, the EASA Form 1 or equivalent is not required to be kept. The fact that the document accompanying a new spare part or appliance will not necessarily be an EASA Form 1 has no impact on these record-keeping requirements.

The inconsistency lies with the fact that the regulator intends to keep on with constant pressure on maintenance organisations while the administrative burden is alleviated/eliminated for organisations producing certain new spare parts and appliances. We do not see the reason(s) why a spare part or appliance manufactured by an organisation not holding a POA (no EASA Form 1) would require to be maintained only by organisations holding a MOA (EASA Form 1). Why would a maintenance organisation not holding a MOA be not enough (no EASA Form 1)?

3. RATIONALE / REASON :

Self-explanatory.

response **Refer to Section 1**

comment 290

comment by: AIRBUS

1. PARAGRAPH / SECTION :

NPA 2017-19, page 22/32, para. 'Rationale'

2. PROPOSED TEXT / COMMENT :Marking of parts:

The EASA indicates in this paragraph that it would like to receive comments from stakeholders with regard to difficulties to obtain the proposed marking for parts with CL III, considering the expected manufacturing standards of these parts.

Airbus opinion:

No opinion other than those already provided.

3. RATIONALE / REASON :

Self-explanatory.

response **Refer to Section 1**

comment 357

comment by: EHA



If the reassessment of existing CL is to be considered a design change, how will these be communicated effectively to operators? Is there potential for large increases in design change as a result? How is the initial communication of CL for all parts to be implemented?

Reference:The initial reference to CL re-classification as design change is on page 5, para's 5 & 6. Reassessment of CL's is also described on page 19, in the middle section starting with "GM 21.A.308(b) explains..."

response **Refer to Section 1**

comment 358

comment by: *Jeff Conner*

Under the heading "Manufacturing of parts and their release for installation during maintenance", EASA states "Stakeholders are also invited to comment on the proposed CL classification (i.e. CL I, II, III and IV) and the corresponding 21.A.309 manufacturing standards and release requirements(e.g. stakeholders' view regarding the need to identify the manufacturer for a part with assigned CL IV.)."

GE Aviation does not agree with the CL classification levels proposed in this NPA. The Criticality Levels defined in this NPA do not align with Safety Analysis categories defined in CS 25.1309 (Catastrophic / Hazardous / Major / Minor / No Safety Effect) which are also referenced in ICA. Failure to use common terminology within EASA regulations will create confusion.

Additionally, GE is concerned that these CL classification levels are not harmonized with FAA regulations and guidance which will drive additional confusion in industry.

response **Refer to Section 1**

comment 388

comment by: *Jeff Conner*

This NPA states that "The European part approval (EPA) marking has been limited (point 21.A.804(a)3) to the cases where the part is released with an EASA Form 1. Parts with CL II and III are to be excluded from the EPA marking since the certificate accompanying the part with CL II and III would usually be a CofC issued in accordance with an industry standard that is widely recognised. Imposing the EU-specific marking could be unbalanced, since that part could already be used in another design. The Agency would like to receive comments from stakeholders with regards to difficulties to obtain the proposed marking for parts with CL III, considering the expected manufacturing standards of these parts."

GE Aviation Comments:

(1) The language proposed in 21.A.308 defines CL II parts/appliances as parts/appliances whose failure "would:

- (i) cause a significant reduction in functional capabilities or safety margin, or
- (ii) cause physical distress to passengers possibly including injuries, or
- (iii) cause physical discomfort to or significant increase in workload for the flight crew."



Parts whose failure would cause these types of problems that have been "produced in accordance with approved design data not belonging to the type-certificate holder of the related product" should continue to be marked with the letters EPA to assist EASA, other national aviation authorities, and other industry stakeholders in defining which DAH to engage should field issues with these parts arise.

(2) The language proposed in 21.A.308 defines CL III parts/appliances as parts/appliances whose failure "would:

- (i) cause a slight reduction in functional capabilities or safety margin, or
- (ii) cause physical discomfort to passengers, or
- (iii) cause a slight increase in workload for the flight crew or require them to use emergency procedures.

Parts whose failure would cause these types of problems that have been "produced in accordance with approved design data not belonging to the type-certificate holder of the related product" should continue to be marked with the letters EPA to assist EASA, other national aviation authorities, and other industry stakeholders in defining which DAH to engage should field issues with these parts arise.

response **Refer to Section 1**

comment 461

comment by: *Safran Aircraft Engines*

Section 3, §3.2.3, page 19/32

The subparagraph "rationale" explains that the reassessment of an existing CL classification is allowed through the Subpart D "Change to Type Design", when applicable (i.e. for other than standard changes). Therefore, if the change affect a CL I or assigns a new CL higher than the original (lower criticality), the change would be a major change and requires the approval from EASA.

However, some design organisations that hold the design approval would be technically capable to reassign CLs (in any direction) following an agreed procedure. The proposed amendment of point 21.A.263 allows that a DOA organisations may be granted the privilege to approve the reassignment of CLs for designs for which they hold the design approval, thus avoiding EASA's involvement in the particular CL reassignment.

EASA is looking forward to receiving the stakeholders' views on whether the CL assignment should be considered a minor change or, as proposed in this NPA, a major change, and if the latter is the case, whether a privilege should be granted for design organization approvals (DOAs) to assign CLs to parts being identified in their previously approved designs.

Safran AE recommends that CL assignment or amendments, whatever for a new part design or an already approved part for which the DAH hold the initial design approval, should be considered as a major change with DAH having the possibility to obtain DOA privilege of such major change approval in the frame of the new LOI rule implementation. The proposed 21.A.263 (c)(8) privilege is not needed and should be suppressed from the proposal.

response **Refer to Section 1**



comment	<p>462</p> <p style="text-align: right;">comment by: <i>Safran Aircraft Engines</i></p> <p>Section 3, § 3.2.3, page 22/32</p> <p>The proposed NPA states that, considering that the European Part Approval (EPA) marking is only required when an EASA Form 1 is issued as per §21.A.804(a)(3) and the Parts CL II, III & IV are excluded from the EPA marking requirement.</p> <p>This means that parts CL II, III & IV with alternate definition to the DAH definition will not have a segregated identification and will use the part number definition of the DAH.</p> <p>This will put the regulatory and legal responsibilities on the DAH (owner of the type design part number) for an alternate definition in case of incident/accident for design he doesn't own and he is not aware of.</p> <p>Proposed text: <u>Marking of parts</u> For parts or appliances produced in accordance with approved design data not belonging to the DAH of the related product, the European part approval (EPA) marking apply to all classification CL I to CL IV. has been limited (point 21.A.804(a)3) to the cases where the part is released with an EASA Form 1. Parts with CL II and III are to be excluded from the EPA marking since the certificate accompanying the part with CL II and III would usually be a CofC issued in accordance with an industry standard that is widely recognised. Imposing the EU-specific marking could be unbalanced, since that part could already be used in another design. The Agency would like to receive comments from stakeholders with regards to difficulties to obtain the proposed marking for parts with CL III, considering the expected manufacturing standards of these parts.</p>
response	<p>Refer to Section 1</p>

4. Impact assessment

p. 23-29

comment	<p>97</p> <p style="text-align: right;">comment by: <i>René Meier, Europe Air Sports</i></p> <p>4 Impact assessment (IA) 4.1 What is the issue p 23ff/32</p> <p>Remark: We think that "what is the issue" does not belong to the Impact assessment, this should be part of 2.1 "why we need to change the rules - issue/rationale" at the beginning of the text.</p> <p>Rationale: "What is the issue" placed in 2.1 already would make understanding of what follows later considerably easier.</p>
response	<p>Refer to Section 1</p>
comment	<p>120</p> <p style="text-align: right;">comment by: <i>ENAC</i></p>



	<p>4.4.3 Social impact</p> <p>we disagree with the affirmation of no relevant social impact caused by this NPA. The analysis is not supported by a minimum of figures, for example how many organisations may be affected. We expect the reasonable risk that the production of parts and appliances under the scope of this NPA may be totally outsourced outside EU, reducing the size of organisations and consequently the number of EU workers. A more detailed analysis on the social impact is considered necessary.</p>
response	Refer to Section 1
comment	<p>129 comment by: CAA-NL</p> <p>Paragraph 4.4.1, Safety Impact: The conclusion of 'no negative safety impact is expected' seems not correct. The paragraph itself explains that the risk of undetected failure is increasing by definition, however when the safety consequences of the failure of those parts in itself are marginal, the slight negative safety impact may be acceptable when offset by bigger advantages in other areas, like cost reduction throughout the system (Para 4.4.4).</p> <p>Further we miss the possible financial and lead-time consequences of not having an airworthiness certificate when importing parts etc from non EU origin in relation with Regulation 1147/2002. This regulation provides for the temporary suspension of the autonomous common customs tariff duties on certain goods imported with airworthiness certificates^[1]. It enables simplified customs procedures for duty-free imports of parts, components and other goods from non-EU countries that are used to manufacture, repair, maintain, rebuild, modify or convert aircraft. This regulation does not apply on part imported on the basis of a CoC.</p> <hr/> <p>^[1] Council Regulation (EC) No 1147/2002 of 25 June 2002 temporarily suspending the autonomous Common Customs Tariff duties on certain goods imported with airworthiness certificates (OJ L170, 29.6.2002, p. 8.).</p>
response	Refer to Section 1
comment	<p>162 comment by: Rolls-Royce Deutschland / DOA Manager D. Stege</p> <p>Chapter 4.1.1 states 'no safety risk'. It should be revised to include risks linked with (a) improper assessment due to insufficient knowledge of final configuration of that individual aircraft having STCs, other changes or exemptions not covered by the TC Holder Type Design and (b) risks appearing if the CL is subject of later changes to a higher level and parts already produced and waiting in production or stock must be re-assessed. That re-assessment is not regulated in this NPA.</p>
response	Refer to Section 1
comment	<p>163 comment by: Rolls-Royce Deutschland / DOA Manager D. Stege</p> <p>Chapter 4.3 should include an 'Option 2 is rule change with EASA as single source to decide on CLs' ref GM 21.A.308(d).</p>

response	Refer to Section 1
comment	164 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> Safety statement in chapter 4.4.1 should be aligned with chapter 4.1.1 content. It should be revised to include risks linked with (a) improper assessment due to insufficient knowledge of final configuration of that individual aircraft having STCs, other changes or exemptions not covered by the TC Holder Type Design and (b) risks appearing if the CL is subject of later changes to a higher level and parts already produced and waiting in production or stock must be re-assessed. That re-assessment is not regulated in this NPA.
response	Refer to Section 1
comment	165 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> It reads as contradiction: 'chances to fail earlier than expected' ... no negative safety impact expected. The justification for that conclusion is not obvious.
response	Refer to Section 1
comment	166 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> Chapter 4.4.3 doesn't consider the additional workload in DOA Holder organisations.
response	Refer to Section 1
comment	167 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> Chapter 4.4.3 says 'Once the approach proposed with this NPA is in place and reaches maturity'. Is there an assessment which time it will require to reach 'maturity'? What is the social impact during that 'pre-mature' phase?
response	Refer to Section 1
comment	168 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> Chapter 4.4.4 says 'Even if affected stakeholders will suffer a negative economic impact, assumed to be minimal'. On which basis it that 'minimal' assumed? Any justification?
response	Refer to Section 1
comment	169 comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i> Chapter 4.4.4 confirms that 'design organisations ... be directly and negatively impacted ..., as expected'. 'The benefit for them ... reduction of running costs of their products, such as maintenance costs'. The intention of a Type Certificate as per ICAO Annex 8 is NOT to influence or even to manage later costs. Why does EASA propose to link TCs with costs?

response	Refer to Section 1	
comment	170	comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>
	Chapter 4.4.4 quotes that 'new parts manufactured in Europe for dual use are delivered with an EASA Form 1, regardless of their CL.' That is not considered in the social impact assessment under chapter 4.4.3.	
response	Refer to Section 1	
comment	171	comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>
	Conclusion is not shared. It could be understood as very optimistic with a clear burden increase on DOAH.	
response	Refer to Section 1	
comment	172	comment by: <i>Rolls-Royce Deutschland / DOA Manager D. Stege</i>
	Chapter 4.6 states that 'Assessment of parts and appliances CLs conducted by the design holder can be monitored during EASA's approval of the design change implicit to the assessment or during DOA oversight'. So the monitoring is purely with the creation of CL at design holder level, with the unknown condition of the individual aircraft! There should be a monitor in place to ensure at maintenance the level of safety is not decreasing. To wait until 'the rate of safety-relevant incidents' requires actions is not pro-active safety management.	
response	Refer to Section 1	
comment	204	comment by: <i>Airlines for Europe (A4E)</i>
	Paragraph/Headline: Impact Assessment	
	Comment: Whatever solution is chosen to attach CL's to components and parts, DAH's must define a way to provide a listing of the CL's of all parts and appliances in their type design. Maintenance organisations will have to provide their incoming goods personnel with the tools to verify CL's on all the parts and components that enter the organisation. It is not mentioned in the impact assessment that this will require resources (especially on IT solutions) from the maintenance organisations. Secondly, purchase orders to our suppliers must specify the (certification) paperwork that must accompany a new part. Depending on the CL of the parts, maintenance organisations will have to tune all their purchasing contracts. This is an extra step in the purchase process and supplier evaluation. Thirdly, during AOG's, some material is delivered to the aircraft as drop shipment and will be inspected under the wing. So also aircraft Certifying Staff must be aware before accepting these parts that CL's must be checked against the part itself and the paperwork.	
response	Refer to Section 1	

comment	<p>291</p> <p style="text-align: right;">comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION :</p> <p>NPA 2017-19, pages 26-28/32, para. 4.4. What are the impacts</p> <p>2. PROPOSED TEXT / COMMENT :</p> <p>The EASA explains in the paragraph 2.1. “why we need to change the rules [–issue/rationale]”: “[...] it is acknowledged that requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary¹⁰”.</p> <p>The note 10 states that current rules already permit certain alleviations to this concept for European light aircraft (ELA) ELA1, ELA 2, and gliders.</p> <p>The paragraph 4.4. seems to be devoted to the substantiation of this statement. But, it is believed that the evaluations provided are not precise enough to conclude on the safety impacts.</p> <p>3. RATIONALE / REASON :</p> <p>With regard to the safety impact, the explanations in the paragraph 4.4.1. give the impression that consideration has been given to parts only taken one at a time, in isolation, separately from each other.</p> <p>The draft amendments proposed in this NPA imply that a <u>significant number of different</u> parts and appliances might no longer be subject to Part-21 manufacturing provisions. It could therefore be expected that the parts manufactured not following such stringent requirements might have more chances than expected to fail (e.g. at the same time, or on the same aircraft, or both) since more manufacturing flaws could remain undetected. It could lead to occurrences that exceed the qualitative and/or quantitative objectives specified in the certification specifications used to develop certification bases. Unrealistic failure condition scenario might become plausible. More corrective action plans might be necessary.</p>
response	<p style="background-color: #FFD700;">Refer to Section 1</p>

comment	<p>292</p> <p style="text-align: right;">comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION :</p> <p>NPA 2017-19, pages 26-28/32, para. 4.4. What are the impacts</p> <p>2. PROPOSED TEXT / COMMENT :</p> <p>The EASA explains in the paragraph 2.1. “why we need to change the rules [–issue/rationale]”: “[...] it is acknowledged that requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary¹⁰”.</p> <p>The note 10 states that current rules already permit certain alleviations to this concept for European light aircraft (ELA) ELA1, ELA 2, and gliders.</p> <p>The paragraph 4.4. seems to be devoted to the substantiation of this statement. But, it is believed that the evaluations provided are not precise enough to conclude on the environmental and social impacts.</p> <p>3. RATIONALE / REASON :</p> <p>Concerning the environmental and social impacts, the EASA claims that parts no longer subject to Part-21 manufacturing provisions will be cheaper (one may have</p>
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response	doubts). In such a case, an increase in the consumption of new spares might be anticipated to the detriment of organisations carrying out component maintenance (less activities) and in the end at the expense of the environment (more waste).
comment	<p>Refer to Section 1</p> <p>293 comment by: AIRBUS</p> <p>1. PARAGRAPH / SECTION : NPA 2017-19, pages 26-28/32, para. 4.4. What are the impacts</p> <p>2. PROPOSED TEXT / COMMENT : The EASA explains in the paragraph 2.1. “why we need to change the rules [–issue/rationale]”: “[...] it is acknowledged that requiring an EASA Form 1 for all aircraft parts (e.g. parts not designed exclusively for aviation) might be too onerous and unnecessary¹⁰”. The note 10 states that current rules already permit certain alleviations to this concept for European light aircraft (ELA) ELA1, ELA 2, and gliders. The paragraph 4.4. seems to be devoted to the substantiation of this statement. But, it is believed that the evaluations provided are not precise enough to conclude on the economic impacts.</p> <p>3. RATIONALE / REASON : On the matter of costs, the EASA states that “<i>in case the part is not minimally critical for safety, the form, which attests compliance with some manufacturing standards imposed by the rules, does not add any particular value</i>”. If the form in itself may not add value, could the compliance verification process leading to the issuance of this form be of utmost importance to ensure manufacturing standards imposed by the rules are complied with? That’s what is at stake and it should not be minimised.</p> <p>The EASA makes appealing assumptions on cost reductions: “<i>The need for an EASA Form 1, in the best of those cases, entails the direct cost for the manufacturing organisations of complying with Part 21 requirements. The reduction of such costs on the manufacturing organisations should be shared among maintenance organisations buying the parts, the air operators/aircraft owners, and air travellers</i>”. Then, the EASA acknowledges that cost reduction opportunities might be limited: “<i>To understand the reduction of costs, it has to be taken into account that only a number of existing POAs will have the opportunity [...] to surrender their approval, since many, after considering the proposed system or any other contractually agreed practice, will still keep their POA in accordance with Part 21. However, for cases where parts are not manufactured primarily for the aviation industry, obtaining an EASA Form 1 for the part was an artificial imposition derived from an inflexible rule</i>”.</p> <p>Further, it is stated that “<i>while this NPA provides an opportunity for flexibility in the bilateral agreement with the US, once the rule is amended, agreements with other third countries (Canada, Brazil) will still mandate that new parts manufactured in Europe for dual use are delivered with an EASA Form 1, regardless of their CL</i>”. This will be another source of burden and costs for the acceptance of components by AMO.</p>

	<p>In conclusion, Airbus is of the opinion that this rulemaking task should be revamped to better address the establishment by Design Approval Holders of their list of commercial parts.</p>
response	<p>Refer to Section 1</p>
comment	<p>323 comment by: SAFRAN TRANSMISSION SYSTEMS</p> <p>4.4.4. Economic impact Option 0: No impact. Option 1: Even if affected stakeholders will suffer a negative economic impact, assumed to be minimal, linked to the need to adapt to the new provisions of the rule (updating internal procedures and contract templates, training, etc.), this impact is one-off and considered minimal compared to the cost savings described below</p> <p>Comment21: the economic impact is very high for POA holders and will affect their economic model, removing most of the earnings from spares. This is to be considered as an output of the economic pressure from the Aircraft manufacturers for "new" A/C.at low production costs</p>
response	<p>Refer to Section 1</p>
comment	<p>324 comment by: SAFRAN TRANSMISSION SYSTEMS</p> <p>4.4.3. Social impact Option 0: No impact. Option 1: No relevant social impact is expected. Once the approach proposed with this NPA is in place and reaches maturity, there should be a smaller number of organisations approved to manufacture in accordance with Part 21, but the same organisations would exist and produce the same type of parts;</p> <p>Comment22: wrong statement, if a smaller number of organization is expected, with associated economic impact on POA holder's economic model, this will lead to less job in EU.</p>
response	<p>Refer to Section 1</p>
comment	<p>372 ❖ comment by: HEICO Aerospace</p> <p>HEICO Comment 1 – Criticality Level - Various Locations Comment: The term Critical, and Criticality Level, are used throughout the NPA. The use of “Criticality Level” for determining the traceability requirements may add to confusion to of the Aerospace Community as to which parts or components are Critical vs Non Critical.</p> <p>Suggested Resolutions: As appropriate, replace “Criticality Level” with “Category Level.” As appropriate, replace “Critical” with “Safety Sensitive.”</p>

Justification: There is already a lack of consistent definition of Critical Parts and Critical Components within the EASA Requirements and the US-EU bilateral agreements. See <https://www.easa.europa.eu/faq/19013> for examples. Assigning all parts a “Criticality Level” could add uncertainty to the classification of a part as “Critical or Non Critical.” Changing the Levels to either “Category Level” will ensure that this proposed change does not increase any confusion. Similarly, the Category Levels are proposed to be based on the potential failure modes and effects of the parts or components. Therefore, it would cause less confusion if, when discussing the classification of parts, the classification is discussed as their “Safety Sensitivity” as opposed to their “Criticality.”

response **Refer to Section 1**

comment 402 comment by: *DGAC France*

The “artificial trick” consisting for a Part-145 to issue a Form 1 “as inspected” described in §4.1.3 of the NPA will remain even if the provision proposed enter into force. Especially in case various DAH's assign different CL to the same part or appliance. It can be difficult for the Part 145 to handle this issue and it could possibly lead to Part 145 to emit a Form 1 "as inspected" on a part for which they only have a CofC in order to solve an AOG or just because they wish to use a part on stock (without Form 1) instead of ordering the same part with a Form 1 (and lose money for not selling/using the part on stock).
On the financial side, in the case a part would cost less without a Form 1 than with a Form 1, Part 145 will be tempted (to remain competitive) to order the part without the Form 1 and then emit a Form 1 "as inspected".
Despite the fact that the Agency believes this NPA could limit the use of the "artificial trick" the issues mentioned in this § might increase its use.

response **Refer to Section 1**

comment 426 comment by: *European Helicopter Association (EHA)*

with reference to sections 4.4.3 and 4.4.4 we are not sure we agree with the assessments of social and economic impact: There must costs that will be pressed onto the OEM’s with respect to maintaining CL’s within their type design. Communication with operators will potentially become more frequent as CL’s change, which is proposed to constitute a design change. In addition, a big assumption appears to be made that parts may get less expensive in the absence of needing a Part 21 approval. Maintaining an ISO9001 or AS9100 standard is not inexpensive.

response **Refer to Section 1**

5. Proposed actions to support implementation

p. 30

comment 392 comment by: *Aviation Suppliers Association*



One element that is not addressed in this discussion is the transition plan for moving from the current system to the system of tomorrow. There will be many parts that do not appear to have the "correct" documentation because they were documented under the current system. EASA should consider a transition plan for ensuring that parts produced before the change continue to be acceptable,

One piece of this plan might include permitting accredited distributors and certificate holders to certify that parts in their inventory were received before the implementation date of the new rules. Such certifications, once made, would serve as evidence that a part existed before the implementation date, and therefore should be subject to the old documentation rules (and not to the new documentation rules). Such legacy equipment should be protected under the system as acceptably documented for receipt by a 145 organization.

Another important element should include a transition period during which both sets of documentation (old and new) will be acceptable for issue and receipt.

EASA should also implement rules, including an appeal process when the rules are not followed, for ensuring that the industry has access to published lists of criticality levels for parts (where such lists are created).

response [Refer to Section 1](#)

comment 427 comment by: *European Helicopter Association (EHA)*
reference to paragraphs 5 and 6: in order to provide parts to foreign countries operating EU made equipment, the OEM's will need to be able to produce EASA Form 1's anyways, regardless of CL assigned, as bilateral agreements will not align. That means continuing to maintain their Part 21 approvals

response [Refer to Section 1](#)



3. Appendix A — Attachments

 [20180322AttachmentUKCAAComent2NPA201719.pdf](#)

Attachment #1 to comment [#302](#)

 [ARSA-comments-NPA-2017-19-final.pdf](#)

Attachment #2 to comment [#430](#)

 [V. Spare Part Certification.pdf](#)

Attachment #3 to comment [#66](#)

