Appendix 6
to Opinion No 02/2019

RELATED NPA: 2017-15 — RMT.0695 — 21.2.2019

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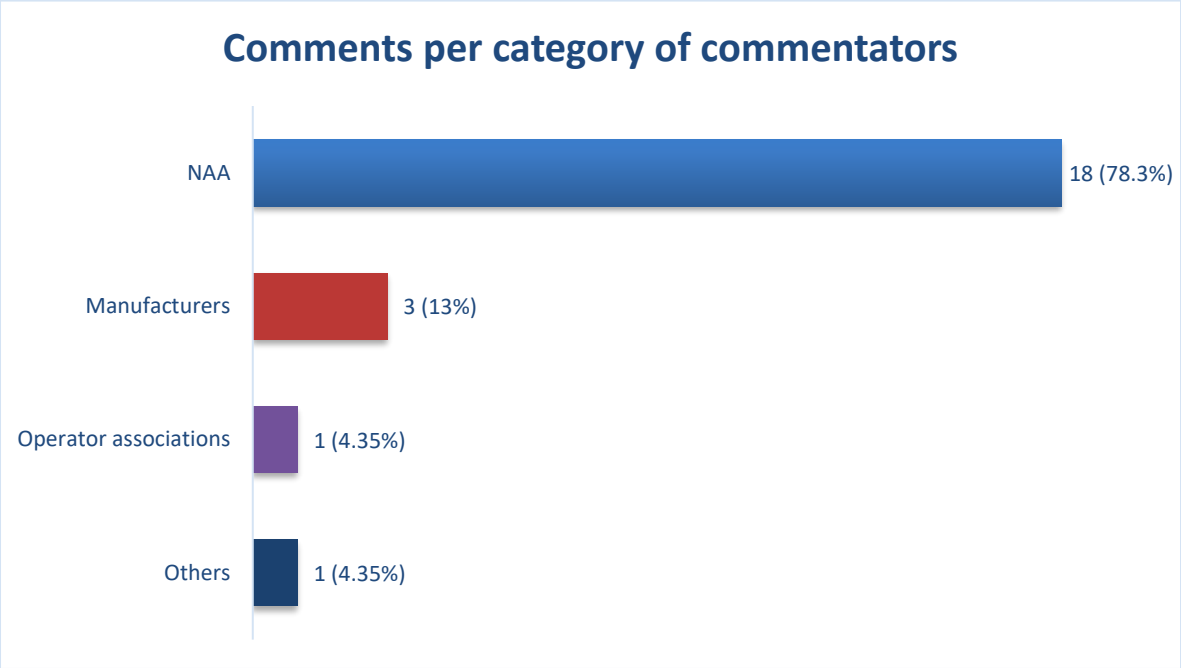
1. Summary of the outcome of the consultation

23 comments were submitted by 10 commenters, including 6 EU NAAs and 2 aircraft manufacturers. 7 of these comments were either directly expressing the support of the commenter to the proposals or stating that the commenter had no comment.



The comment which proposed the most significant change questioned the use of a weight threshold as an eligibility criteria for non-ETOPS operations and proposed to rather rely only on the low occupancy criteria.

Although not part of the analysed options of the regulatory impact assessment (RIA), the possibility to remove the weight threshold was discussed in the NPA 2017-15. The discussion envisaged to rely on the current low occupancy criteria (MOPSC of 19 or less) and as well on a criterion defining the type of operation (i.e. non-scheduled).

The issue highlighted by this comment is the fact that there is currently no adequate definition of commercial business jet operations. The JAA times considered that the weight threshold together with the low occupancy criterion was adequate. However, it is now clear that in some specific cases these criteria are not appropriate and create a level playing field issue for some operators. As explained in the related comment, some operations having similar characteristics with the same aeroplane type would have to comply with different requirements. For example, the A318 is certified with different MCTOM variants, below and above 60.000 kg; when used in business operations, some A318 variants would therefore be able to operate in the non-ETOPS category, whereas the other heavier variants would not be eligible for non-ETOPS operations.

As stated in NPA 2017-15, option 1 (‘Amend the non-ETOPS operation MCTOM threshold and remove the type design considerations for 120–180-minute operations’) was considered to be the one with the most positive impact and at the same time the simplest one. The impacts of the possibility to remove the weight threshold were expected to be similar to the identified option 1 and therefore this possibility had not been selected as one of the options to be considered in the impact assessment.

Based on this comment, and as it is considered that the non-ETOPS operations should only be applicable to non-scheduled operations, the use of a dual criterion, low occupancy and 'non-scheduled' operations was initially found to be adequate to characterise business jet operations.

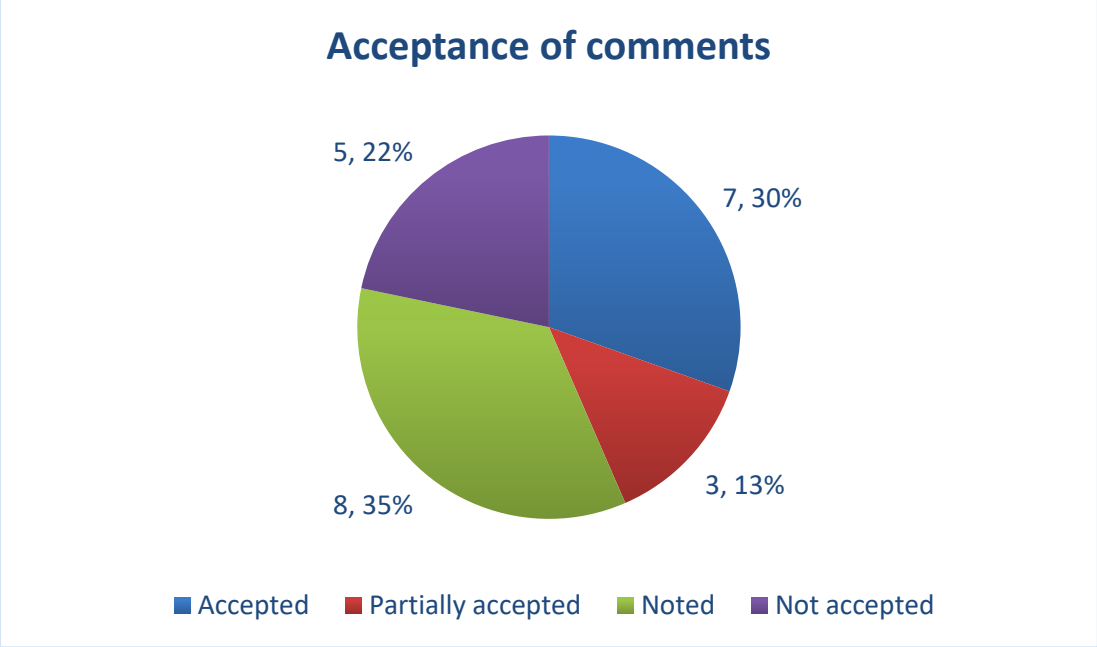
Going one step further, it is considered that the low occupancy criteria could be used as the only criteria, as it is considered that scheduled operations with an aeroplane above 45360 kg with an MOPSC of 19 or less is unrealistic.

Therefore, the initial proposal has been amended by removing the weight threshold for non-ETOPS operations.

Statistics on the comments received

In summary, 43 % of the comments were accepted or partially accepted by EASA, and 35 % of the comments were noted, since they were supportive of the NPA or the commenter had no comment on the proposals.

Only 22 % of the comments received were not accepted.



2. Individual comments and responses

In responding to comments, the following standard terminology has been applied to state EASA's position:

(a) **Accepted** — EASA agrees with the comment and any proposed amendment is wholly transferred to the revised text.

(b) **Partially accepted** — EASA either partially agrees with the comment, or agrees with it but the proposed amendment is only partially transferred to the revised text.

(c) **Noted** — EASA acknowledges the comment, but no change to the existing text is considered to be necessary.

(d) **Not accepted** — The comment or the proposed amendment is not agreed by EASA.

(General Comments)	-

comment	*11* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* The Swedish Transport Agency support the proposal.
response	Noted. Thanks you for your feedback.

comment	*12* comment by: *UK CAA* **General Comment** The UK CAA appreciates the considerable amount of effort that has gone into providing such a comprehensive summary of the issues and reasons for change. This helped considerably in understanding the rationale and principles intended with the proposed changes.
response	Noted. Thank you for your feedback.

comment	*14* comment by: *AIRBUS* While we agree with the intent of this NPA, we disagree with the approach chosen which is continuing to use mass as a regulatory discriminator for this particular subject. We therefore propose to remove entirely the MCTOM limitation in the proposed amendments, and keep only the maximum operational passenger seating configuration (MOPSC) of 20 or more as regulatory discriminator. This approach: - Would have no adverse safety impact. As detailed in section 4.4.1 of the NPA, the existing safety risk models are independent from the MCTOM. Therefore, as with the proposed

increase of the MCTOM, removing the MCTOM criteria is expected to have no effect with respect to safety risk.
- Ensures that it will not be necessary to revise again the related regulation for a further increase of the MCTOM criteria to account for future weight increase of concerned "business jets".
- Would avoid to creates a distortion between "on demand" operators of aircraft with MCTOM below or above 60,000kg.

For instance, an A318 in a "business jet" configuration, i.e. with 19 seats or less, has weight variants below 60,000 kg and above 60,000 kg. It means that with the current NPA proposal, an operator of an A318 with 19 seats or less and a MCTOM of less than 60,000 kg would be able to operate without ETOPS approval up to 180 min diversion time, while another operator with the same aircraft type and 19 seats limitation, but with a MCTOM slightly above 60,000 kg would have to get an ETOPS operational approval for any flights beyond 60 min. This situation would have a negative economic impact on the concerned operators without any safety benefits as said above.
Therefore our proposal to remove entirely the MCTOM criteria would allow to fully achieving one of the objective of the NPA (ref section 4.2) which is to "ensure a level playing field for CAT operators of aeroplanes with an MOPSC below 19 and, therefore, avoid an undue burden on European CAT operators of business jet aeroplanes".

As explained in the NPA, the background for initially lifting the ETOPS threshold from 60 min to 180 min was primarily based on the low occupancy of aircraft involved in on-demand operations. The MCTOM criteria was introduced initially to further characterize these aircraft and separate them from aircraft involved in scheduled operations. However, this MCTOM differentiation is no more meaningful, as there are nowadays aircraft with MCTOM above 60,000 kg and with low occupancy that are involved in on-demand operations.

It shall be noted also that there are aircraft with a MCTOM lower than 60,000 kg but with more than 19 passengers that are involved in scheduled operations, including ETOPS operations (within 120 min or 180 min). Removing the MCTOM limitation would not change this situation. It further shows that the relevant discriminator is the number of occupants, and not the MCTOM. Furthermore, for obvious economic reasons, it is unlikely that an operator will perform scheduled operations with an aircraft with a MCTOM higher than 60,000 kg but with less than 19 passengers, and there is no reason why removing the MCTOM limitation would change this situation.

As a result, the removal of the MCTOM would also have no impact on OEM strategy versus the need for an ETOPS type certification:
- Should the airplane be intended to be used on routes beyond 60 min diversion time, and with more than 19 passengers, an ETOPS type certification would then be required regardless of its MCTOM.
- Should the airplane be certified to carry 19 passengers or less, an ETOPS type certification would then not be required regardless of its MCTOM.

The mass-based threshold is therefore of no added value in providing the clear definition needed for type design, as only the passenger discriminant is relevant in this case.

Last but not least, the removal of the MCTOM would also ensure a greater harmonization with other major EDTO standards and regulations, such as those from ICAO, FAA and Transport Canada.

	As a conclusion and based on the above listed arguments, it is proposed to remove entirely all references to an MCTOM limitation in the proposed amendments, and to keep only the MOPSC of 19 or less as the regulatory discriminator for the applicability of non-ETOPS operations with Class A aeroplanes.
response	Accepted. The resulting text has been amended by removing the mass threshold and relying only on the low occupancy criteria.

comment	*16* comment by: *Danish Aviation Association* ES-DAA appreciates the proposals in this NPA 2017-15, which seem very reasonable and progressive. We support the objective to harmonising the applicability of non-ETOPS operation requirements for the affected aeroplanes operated by European-based commercial air transport (CAT) operators with similar CAT operators in other parts of the world, including the United States, Canada, Australia and New Zealand. We agree to the proposal to increase the current non-ETOPS operation mass threshold from 45 360 to 60 000 kg in order to accommodate growth of this market segment and to remove the specific type design approval for non-ETOPS operations between 120 and 180 minutes. It is also our assessment that the proposed amendments will maintain the current level of safety for the affected aeroplanes, while allowing for increased European harmonisation with other regulatory jurisdictions and avoiding undue costs for aeroplane manufacturers and operators. Best Regards Dan Banja Secretary-General, Vice chair ECOGAS & Member of EASA GA.COM
response	Noted. Thank you for your feedback.

comment	*18* comment by: *Federal Office of Civil Aviation (FOCA), Switzerland* The Federal Office of Civil Aviation (FOCA) would like to thank the Agency for the good work and the opportunity to comment on this draft NPA.
response	Noted. Thank you for your feedback.

comment	*21* comment by: *EUROCONTROL* The EUROCONTROL Agency welcomes the publication of EASA Notice of Proposed Amendment 2017-15. It also thanks EASA for the opportunity that has been given to submit comments. In addition, despite the fact that it has no comments to make on the NPA, the EUROCONTROL Agency would like to confirm that it will read with interest the

	comments from stakeholders, if any received by EASA, and the responses given to them by EASA in its future comment-response document (CRD).
response	Noted. Thank you for your feedback.

comment	*22* comment by: *Gulfstream Aerospace* Gulfstream understands the subject NPA proposes to increase the current non-ETOPS operation mass threshold from 45 360 to 60 000 kg in order to accommodate growth of this market segment and to remove the specific type design approval for non-ETOPS operations between 120 and 180 minutes. The proposed amendments will maintain the current level of safety for the affected aircraft models, while allowing for increased European harmonization with other regulatory jurisdictions, and reduced costs for aircraft manufacturers and operators. This NPA would essentially harmonize FAA and EASA ETOPS airworthiness requirements and Gulfstream fully supports the new rule implementation. Gulfstream recommends a provision with instructions be added to the new rule to address how existing airworthiness approvals would be superseded with this rule change. Under some current 180-minute EASA airworthiness approvals, aircraft manufacturers are responsible for continued airworthiness and operators are responsible for continued surveillance. Presumably, these existing approvals would be updated with appropriate EASA Type Certificate Data Sheet (TCDS) revisions to remove those on-going requirements. Further clarification should be added to the new rule with specific instructions as to how the appropriate EASA TCDS revisions and operator approvals would be updated to remove the current requirements.
response	Partially accepted. The Agency does not consider necessary to introduce a specific provisions related to the already granted 180 mn non-ETOPS type design approvals. However, in order to ensure a level playing field, the Agency proposes to amend the related type certificate data sheet (TCDS) of the related aeroplane by removing a current condition on the TCDS for the conduct of the 180 mn non-ETOPS operations linked with a specific modification to be fitted on the aeroplane.

comment	*23* comment by: *Gulfstream Aerospace Corporation* General comment: Gulfstream appreciates and fully supports this rule change effort. To ensure a consistent transition, Gulfstream recommends adding instructions to address how existing ETOPS approvals under the type certificate would be superseded with this rule change. Presumably, these existing approvals would be updated with appropriate EASA Type Certificate Data Sheet (TCDS) revisions to remove those on-going requirements. Further clarification is recommended with specific instructions as to how the appropriate EASA TCDS revisions and applicable operator approvals would be updated to remove the current requirements.

response | Accepted.

In order to ensure a level playing field, the Agency proposes to amend the related type certificate data sheet (TCDS) of the related aeroplane by removing a current condition on the TCDS for the conduct of the 180 mn non-ETOPS operations linked with a specific modification to be fitted on the aeroplane.

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comment | *17* comment by: *Luftfahrt-Bundesamt*

LBA has no comments on NPA 2017-15.

response | Noted.

Thank you for your feedback.

3.2. Draft AMC and GM (Draft EASA decision), 3.2.1 AMC/GM to Annex IV (Part-CAT) p. 9-14

comment | *1* comment by: *DGAC Deputy Head of aircraft and operations rulemaking department*

AMC1 CAT.OP.MPA.140(d) :
DGAC France suggests adding an additional condition before the actual paragraph (a) such as:
(a) Aeroplanes should be certified to CS25 or equivalent (e.g. FAR25).

<u>Rationale :</u> With the proposed changes in AMC1 CAT.OP.MPA.140(d), the approval referred to in CAT.OP.MPA (a)(2) can be issued for CS25 AND CS23 aeroplanes while we understand that the NPA does not provide any rationale (in particular paragraph 4.1.4) for such approval with CS23 aeroplanes.
Indeed all conditions that aeroplanes should be certified to CS25 (or equivalent) and type design considerations are considered to be deleted and so the CS25 type design certification is no longer a compulsory prerequisite. But this NPA does not provide any rationale to extend CAT.OP.MPA (a)(2) approval to CS23 aeroplanes and anyway, DGAC France does not support this extension to CS23 aeroplanes.

response | Accepted.

The resulting text of the AMC has been amended accordingly.

comment | *2* comment by: *DGAC Deputy Head of aircraft and operations rulemaking department*

AMC1 CAT.OP.MPA.140(d) :
DGAC France suggests modifying the new paragraph (g)(4) as follows:

ERA aerodrome(s): the operator should ensure that ERA aerodromes are available for the intended route, within the distance flown in 180 minutes based upon the OEI cruising speed, ~~which is a speed within the certified limits of the aeroplane,~~ selected by the operator within

	the certified limits of the aeroplane and approved by the competent authority, confirming that, […]. *Rationale: This proposal clarifies the sentence without modifying its meaning.*
response	Not accepted. The paragraph (g)(4) is aligned with the current wording of AMC20-6. Therefore it is considered that, for consistency reasons, it is preferable to keep the current alignment even if the meaning of the sentence would not be change by the proposed change.
comment	*3* comment by: *DGAC Deputy Head of aircraft and operations rulemaking department* AMC1 CAT.OP.MPA.140(d): DGAC France suggests modifying the new paragraph (g)(4) as follows: ERA aerodrome(s): […] and approved by the competent authority, confirming that, based on the available meteorological information, the weather conditions at ERA aerodromes are at or above the applicable minima for the applicable ~~the~~ period of time, in accordance with CAT.OP.MPA.185. ~~for which the aerodrome(s) may be used.~~ *Rationale: In the draft AMC1 CAT.OP.MPA.140(d), the Table 1 "Planning minima" is deleted. DGAC understands that the applicable planning minima and period of time to be considered for ERA aerodromes will then be the minima and period from CAT.OP.MPA.185 (c). If this interpretation is correct, DGAC suggests adding a reference to CAT.OP.MPA.185 (c) in the new paragraph (g) (4). This would avoid any wrong interpretation, in particular concerning the period of time to be considered for the availability of the ERA aerodrome.* *In addition DGAC France would like to point out that a difference currently exists between the definitions of the period to be considered, in:* • *CAT.OP.MPA.140 (current (h)(4)): period of time during which the aerodrome may be used,* • *CAT.OP.MPA.185 (c) : period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome,* • *AMC 20-6 rev. 2 App. 5: period commencing at the earliest potential time of landing and ending one hour after the latest nominated time of use of that aerodrome.*
response	Accepted. The resulting text has been amended accordingly. Regarding the possible discrepancy contained in AMC20-6, the Agency has taken note of the possible issue, which will be addressed in the scope of another rulemaking task RMT.0577 specifically dealing with EDTO.
comment	*4* comment by: *DGAC Deputy Head of aircraft and operations rulemaking department*

AMC1 CAT.OP.MPA.140(d) :
The Table 1 “Planning minima” is deleted. We point out that this NPA does not provide any rationale for this reduction of margin.

Rationale: In the draft AMC1 CAT.OP.MPA.140(d), the Table 1 “Planning minima” is deleted. As described in our previous remark (#3), DGAC understands that the applicable planning minima and period of time to be considered for ERA aerodromes will then be the minima and period from CAT.OP.MPA.185 (c). If this interpretation is correct, and then the minima and period to be considered are from CAT.OP.MPA.185 (c), we note that, in certain situation, these items are less limitative than the current applicable minima.

response

Noted.

The table 1 “planning minima” of AMC1 CAT.OP.MPA.140(d) was removed as it was not consistent with CAT.OP.MPA.185 and in addition it was expected to be completely revised in the frame of the AWO rulemaking task (RMT.0379).

comment

5 comment by: *DGAC Deputy Head of aircraft and operations rulemaking department*

AMC1 CAT.OP.MPA.140(d)
DGAC France suggests modifying the new paragraph (g) "Dispatch/flight planning rules" as follows:
[…] (1) Fuel and oil supply: ~~an aeroplane should not be dispatched~~ for releasing an aeroplane on an extended range flight ~~unless~~, the operators should ensure that it carries sufficient fuel and oil to meet ~~comply with~~ the applicable operational requirements and any additional fuel that may be ~~reserves~~ determined in accordance with the following: […]

Rationale: This proposal clarifies the sentence without modifying its meaning and add consistency with AMC 20-6

response

Accepted.

The resulting text has been amended accordingly.

comment

6 comment by: *DGAC Deputy Head of aircraft and operations rulemaking department*

AMC1 CAT.OP.MPA.140(d) :
DGAC France suggests modifying the new paragraph (g) as follows:

(g)(1)(i) Critical fuel scenario: In establishing the critical fuel reserves, the applicant is to determine the fuel necessary to fly to the most critical point of the route and execute a diversion to ~~the critical point is the furthest point from~~ an alternate aerodrome assuming a simultaneous failure of an engine and the cabin air pressurisation system. [...]

Rationale: The definition of the critical point in this paragraph should be clarified since it is misleading. Indeed, the furthest point from an alternate aerodrome may be at the beginning of the flight, where the fuel on board is sufficient to reach the alternate without additional fuel. In this case, the furthest point from an alternate aerodrome is not the critical point. This proposals adds also consistency with AMC 20-6

response	Accepted. The resulting text has been amended accordingly.

comment	*7* comment by: *DGAC Deputy Head of aircraft and operations rulemaking department* Paragraph (g)(1)(i) Critical fuel scenario: […] For those aeroplanes that are type certified to operate **above flight level 450**, the critical point is the furthest point from an alternate aerodrome assuming an engine failure. The operator should carry additional fuel for the worst case fuel burn condition (one engine vs two engines operating) if this is greater than the additional fuel calculated in accordance with the fuel requirements in CAT.OP.MPA, as follows: *<u>Question:</u> Why are the potential constraints on the flight level related to the quantity of oxygen to be carried not taken into account for aeroplanes certified to operate above FL450? If this constraint should be taken into account, then the sub-paragraph (i)(A)(c) is redundant with (i)(A)(b) and might be deleted.*
response	Accepted. The provisions for operations above FL450 were initial stemming from JAR OPS 1 and in any case are not considered any more consistent taking into account the current certification specifications. The resulting text has been amended accordingly.

comment	*8* comment by: *DGAC Deputy Head of aircraft and operations rulemaking department* DGAC France suggests modifying the actual paragraph (h)(1)(i)(A) as follows: fly from the critical point to an alternate aerodrome: a) at 10 000 ft; or b) at 25 000 ft or the single-engine ceiling, whichever is lower, provided that all occupants can be supplied with and use oxygen for the time required to fly from the critical point to an alternate aerodrome; or [...]
response	Not accepted. A list of conditions may only include one ‘or’.

comment	*9* comment by: *DGAC Deputy Head of aircraft and operations rulemaking department* AMC1 CAT.OP.MPA.140(d) DGAC France suggests modifying the actual paragraph (h)(1)(i)(B) as follows: descend and hold there for 15 minutes at 1 500 ft (450 m) above aerodrome elevation ~~for 15 minutes~~ in ~~international~~ standard ~~atmosphere (ISA)~~ conditions; and *<u>Rationale:</u> This proposal harmonises the sentence with AMC1 CAT.OP.MPA.150 (b) without modifying its meaning.*

response	Partially accepted. The intent being to ensure alignment with the current wording of AMC20-6, only the proposed changes which were increasing alignment were transposed in the resulting text.

comment	*10* comment by: *DGAC Deputy Head of aircraft and operations rulemaking department* AMC1 CAT.OP.MPA.140(d) DGAC France suggests listing in new paragraph (e) the aeroplane's significant systems to be inspected during the pre-departure check.
response	Accepted. A definition of what is meant by 'significant systems' in the context of non-ETOPS operations has been introduced in a new guidance material (GM) together with a non-exhaustive list of such systems provided as an example.

comment	*13* comment by: *UK CAA* **Page No:** 9 **Paragraph No:** 3.2.1 (a) **Comment:** Page 9, item 3.2.1, requires the relevant information to be written in the operations manual. Some of the current information proposed for deletion could be usefully retained to ensure that competence and experience are taken into account. **Justification:** This would ensure that while the aircraft is not necessarily ETOPS, the operator at least has an idea what is involved and the crew are adequately trained – this latter is covered in (d). **Proposed Text:** Amend to read: "(a) For operations between 120 and 180 minutes due account should be taken of the aircraft's design and capabilities and the operator's experience related to such operations."
response	Not accepted. As stated in NPA 2017-15, during the last 15 years, no accidents or incidents during non-ETOPS operations have been attributed to power plant malfunction or failures, nor to critical aeroplane components or systems. Based on this and taking into account also the fact that the current provisions do not contain any specific guidance on what constitute an adequate experience, it is considered that there is no need for a criteria on the experience of the operator on such operations. In any case, 120-180 mn non-ETOPS operations remain subject to the competent authority approval, which has to thoroughly assess the operator's application for such operations.

comment	*15* comment by: *Transport Malta - Civil Aviation Directorate* Airworthiness and Maintenance requirements should be included in Part-M requirements and AMC and not in Part-CAT. The NPA approach means more fragmentation of requirements in airworthiness for the industry and NAAs working in the field of Airworthiness, creating more difficulty in training of personnel, managing safety oversight having to refer to different documents. This will also create even more cross-domain confusion.
response	Not accepted. Maintenance considerations are already part of other SPA requirements in Regulation (EU) No 965/2012 as in any case Annex I (Part-M) to Regulation (EU) No 1321/2014 does not consider specific types of operations.

comment	*20* comment by: *Federal Office of Civil Aviation (FOCA), Switzerland* Maintenance program in accordance with Annex 1 Part M shall amend the respective changes. Flight crew training, Pre-departure check, MEL, and Dispatch flight planning rules. This will ensure the airworthiness as well as safe operation of the aircraft. *Comment FOCA:* if the option 1 were to be amended, this would have an impact with the regulation laid down in the Subpart SEC as noted in the text below. The manufacturer would need to be advised in relation to the type design changes, weight factor MTOM and CAT operation would need to be reviewed for the Subpart SEC Security. *ORO.SEC.100 Flight crew compartment security – aeroplanes.* *(a) In an aeroplane which is equipped with a flight crew compartment door, this door shall be capable of being locked and the means shall be provided by which the cabin crew can notify the flight crew in the event of a suspicious activity or security breaches in the cabin* *(b) All passenger-carrying aeroplanes of a maximum certificated take-off mass exceeding 45 500 kg, or with a MOPSC of more than 60 engaged in the commercial transportation of passengers, shall be equipped with an approved flight crew compartment door that is capable of being locked and unlocked from either pilot's station and designed to meet the applicable airworthiness requirement.* *(c) In all aeroplanes which are equipped with a flight crew compartment door in accordance with point (b) above:* *(1) This door shall be closed prior to engine start for take-off and will be locked when required by security procedures or by the pilot in command until engine shut down after landing , except when deemed necessary for authorized persons to access or egress in compliance with national civil aviation security programs; and* *(2) Means shall be provided for monitoring from either pilot's station the entire door area outside the flight compartment to identify persons requesting entry and to detect suspicious behavior or potential threat.*
response	Not accepted. The current MCTOM threshold used in ORO.SEC.100 is not linked at all with the non-ETOPS MCTOM threshold. The purpose behind is totally different and therefore if one changes, it is considered that there is no reason to amend the other one.

4. Impact assessment (IA)	p. 16-34

comment	*19* comment by: *Federal Office of Civil Aviation (FOCA), Switzerland* FOCA recommends that option 1 is the appropriate option to implement and to comply with the new regulation requirements. Amending the non-ETOPS operation MCTOM threshold with removing the type design considerations proposed in option 1, is an appropriate method of leaving the operator with a higher playing field in respects to their operations. Amending the weight to 60 000 kg gives a wide range in the threshold for the newer aircraft models types being presently manufactured. In terms of safety, should have no effect. From an airworthiness perspective there is no effect to the requirements. Environment shall be taken into consideration and the option 1 provides that advantage. To ensure the safety of design with the non-ETOPS approval all criteria changes should be met.
response	Noted. Thank you for your feedback.