



Notification of a Proposal to issue a Certification Memorandum

Large Aeroplane Evacuation Certification Requirements – Cabin Crew Members Assumed to be On Board

EASA Proposed CM No.: Proposed CM–CS-008 Issue 01 issued 16 September 2015

Regulatory requirement(s): CS 25.803

In accordance with the EASA Certification Memorandum procedural guideline, the European Aviation Safety Agency proposes to issue an EASA Certification Memorandum (CM) on the subject identified above. All interested persons may send their comments, referencing the EASA Proposed CM Number above, to the e-mail address specified in the “Remarks” section, prior to the indicated closing date for consultation.

EASA Certification Memoranda clarify the European Aviation Safety Agency’s general course of action on specific certification items. They are intended to provide guidance on a particular subject and, as non-binding material, may provide complementary information and guidance for compliance demonstration with current standards. Certification Memoranda are provided for information purposes only and must not be misconstrued as formally adopted Acceptable Means of Compliance (AMC) or as Guidance Material (GM). Certification Memoranda are not intended to introduce new certification requirements or to modify existing certification requirements and do not constitute any legal obligation.

EASA Certification Memoranda are living documents into which either additional criteria or additional issues can be incorporated as soon as a need is identified by EASA.



Log of issues

Issue	Issue date	Change description
001	16.09.2015	First issue.

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1. Introduction

1.1. Purpose and scope

The purpose of this Certification Memorandum is to provide specific clarification and additional guidance regarding the number of cabin crewmembers assumed to be present on board when determining compliance to the passenger and crew evacuation certification requirements of CS-25.

1.2. References

It is intended that the following reference materials be used in conjunction with this Certification Memorandum:

Reference	Title	Code	Issue	Date
CS 25.803	Emergency Evacuation	---	---	---
AMC 25.803	Emergency Evacuation	---	---	---
FAA AC 25-17A	Transport Airplane Interiors Crashworthiness Handbook	---	---	18/05/09
FAA AC 25.803-1A	Emergency Evacuation demonstrations	---	---	12/03/12
EASA Safety Information Bulletin	Minimum Cabin Crew for Twin Aisle Aeroplanes	---	---	---

1.3. Abbreviations

AMC	Acceptable Means of Compliance
CM	Certification Memorandum
CS	Certification Specification
EASA	European Aviation Safety Agency

2. Background

In this document CS-25 specifications are quoted in several places. However, many aeroplane types in service have been certificated to earlier type certification bases. The certification principles in this Certification Memorandum are equally applicable to those aeroplanes and in such cases the references to CS-25 requirements in this document should be taken as applying to the corresponding paragraphs of the relevant certification code.

CS 25.803 reads as follows:

“CS 25.803 Emergency evacuation

(See AMC 25.803)

(a) Each crew and passenger area must have emergency means to allow rapid evacuation in crash landings, with the landing gear extended as well as with the landing gear retracted, considering the possibility of the aeroplane being on fire.



(b) Reserved.

(c) For aeroplanes having a seating capacity of more than 44 passengers, it must be shown that the maximum seating capacity, including the number of crew members required by the operating rules for which certification is requested, can be evacuated from the aeroplane to the ground under simulated emergency conditions within 90 seconds. Compliance with this requirement must be shown by actual demonstration using the test criteria outlined in Appendix J of this CS-25 unless the Agency find that a combination of analysis and testing will provide data equivalent to that which would be obtained by actual demonstration.”

It can be noted that this airworthiness specification refers to the operating rules.

2.1. Effect of Operational Rules in Force Prior to October 2014

Prior to October 2014, the operational requirement in question was EU OPS 1.990. This requirement (and its identically worded predecessor requirement JAR-OPS 1) reads as follows:

“JAR-OPS 1.990 and Commission Regulation (EC) No 859/2008 (EU-OPS) OPS 1.990

Number and composition of cabin crew

(a) An operator shall not operate an aeroplane with a maximum approved passenger seating configuration of more than 19, when carrying one or more passengers, unless at least one cabin crew member is included in the crew for the purpose of performing duties, specified in the Operations Manual, in the interests of the safety of passengers.

(b) When complying with subparagraph (a) above, an operator shall ensure that the minimum number of cabin crew is the greater of:

- 1. one cabin crew member for every 50, or fraction of 50, passenger seats installed on the same deck of the aeroplane; or*
- 2. the number of cabin crew who actively participated in the aeroplane cabin during the relevant emergency evacuation demonstration, or who were assumed to have taken part in the relevant analysis, except that, if the maximum approved passenger seating configuration is less than the number evacuated during the demonstration by at least 50 seats, the number of cabin crew may be reduced by 1 for every whole multiple of 50 seats by which the maximum approved passenger seating configuration falls below the certificated maximum capacity.*

(c) [...]”

It can be noted that this operational requirement set two numerical limits, and required that the larger of the two be taken as the minimum acceptable number of cabin crew members to be included in the crew.

The first (para (b) 1.) was a simple arithmetic limit calculated from the number of passenger seats installed on the same deck of the aeroplane, whereas the second (para (b) 2.) referred back to the aeroplane certification emergency evacuation demonstration or analysis (i.e. as required by CS 25.803(c) above). This second limit could however, be reduced by one cabin crew member for every whole multiple of fifty passenger seats by which the number installed on the aeroplane was below the number substantiated in the aeroplane certification emergency evacuation demonstration or analysis.

This allowance to operate an aeroplane with fewer cabin crew members than had been assumed in the certification emergency evacuation demonstration or analysis meant that the first limit of one cabin crew member per whole, or partial, multiple of fifty installed passenger seats on each deck of the aeroplane became in practice the only limit.

In the case of aeroplanes with actual passenger seating capacities approaching the maximum limit set by the demonstration/analysis used for compliance to CS 25.803, the effective negation of the second limit had little effect.



However, in the case of aeroplanes with appreciably lower passenger seating capacities, the effect in some cases was to allow the minimum calculated cabin crew member number to be such that when the aeroplane was operated with that number it could be questioned as to whether sufficient cabin crew members would be on board to effectively attend to evacuation management. This is explained further in Section 3.2.

On the other hand, observation of actual airline crewing arrangements indicated that in practice operations with only the minimum number of required cabin crew members on board was rare. It was therefore considered that in the main a real and present safety risk did not exist and a focus on correcting the issue did not arise. However, it was recognised that a potential weakness existed in the operational rules.

The effect is most marked on twin aisle aeroplanes due to airlines mostly choosing to have actual in service cabin layouts for these aeroplanes with overall passenger seating capacities appreciably lower than the maximum allowable. This is as a result of lower density seating in cabin zones with the higher class seating commonly offered in long haul operations.

However, the same effect can also be noted on certain single aisle aeroplane types.

2.2. Effect of Operational Rules in Force Post October 2014

As explained above, EASA certification and operational experts had been in agreement for some time that the European operational rules did not fully ensure a sufficient number of cabin crew members would be on board should an emergency evacuation be necessary. For this reason, when new EU operational regulations were developed it was proposed by the Agency that the allowance to reduce the minimum cabin crew number from that assumed in the aeroplane certification emergency evacuation demonstration or analysis be removed. This would provide for harmonisation between the certification and operational regulations.

This was agreed, and from 28th October 2014, Commission Regulation (EU) No 965/2012 came into force.

In regards to minimum cabin crew, this new operational regulation reads as follows:

“ORO.CC.100 Number and composition of cabin crew

- (a) The number and composition of cabin crew shall be determined in accordance with 7.a of Annex IV to Regulation (EC) No 216/2008, taking into account operational factors or circumstances of the particular flight to be operated. At least one cabin crew member shall be assigned for the operation of aircraft with an MOPSC of more than 19 when carrying one or more passenger(s).*
- (b) For the purpose of complying with (a), the minimum number of cabin crew shall be the greater of the following:*
 - (1) the number of cabin crew members established during the aircraft certification process in accordance with the applicable certification specifications, for the aircraft cabin configuration used by the operator; or*
 - (2) if the number under (1) has not been established, the number of cabin crew established during the aircraft certification process for the maximum certified passenger seating configuration reduced by 1 for every whole multiple of 50 passenger seats of the aircraft cabin configuration used by the operator falling below the maximum certified seating capacity; or*
 - (3) one cabin crew member for every 50, or fraction of 50, passenger seats installed on the same deck of the aircraft to be operated.*
- (c) [...].”*

Guidance in the intent of this rule can be found in GM1 ORO.CC.100.

It can be noted that a reduction allowance continues to be included (i.e. para. (b)(2)), but only in the rare case that “.. the number under (1) has not been established”.



Except for aeroplanes first type certificated before 1967, that do not have a quantified emergency evacuation requirement in their certification basis, (b)(2) has no effect because the number under (1) has been established, as explained in section 3.

In complying with the new ORO.CC.100 regulation, aeroplane operators will be required to take into account “the number of cabin crew members established during the aircraft certification process”.

This will necessitate operators contacting the organisation responsible for the airworthiness certification of their aeroplane cabin seating layout in order to request this number.

This Certification Memorandum is issued in order to clarify the number of cabin crew members that the design organisation should indicate to an operator, when such a request in connection with the new operational rule is made.

3. EASA Certification Policy

3.1. General

The applicant for approval of a passenger cabin design must show compliance to the emergency evacuation specifications of CS 25.803. In the case of cabins with more than 44 installed passenger seats, this must be done by actual demonstration or by analysis based on previous demonstration.

The specifications of CS 25.803 must be substantiated for the desired maximum passenger seating capacity and with the number of crew members required by the operating rules.

For a particular aeroplane type the applicant for the aeroplane Type Certificate (TC) will be the first to perform this exercise. The TC applicant will achieve this via a demonstration or analysis involving the desired maximum passenger seating capacity. For reasons of an optimised design, the maximum passenger seating capacity substantiated will normally be at or approaching that allowed by CS 25.807 for the number and type of emergency exits that the TC applicant has chosen to provide.

The maximum passenger seating capacity substantiated will be quoted in the EASA Type Certification Data Sheet (TCDS) published on the EASA website.

Approval for any subsequent cabin layout, with a passenger seating capacity of up to but not exceeding that first substantiated, can rely on similarity to the original substantiation by the Type Certificate holder. In other words, the design organisation will show that the new cabin layout is still of conventional design and that continued compliance to CS 25.803 can thus be assumed on the basis of not exceeding the maximum substantiated passenger seating capacity indicated in the TCDS.

In the case of subsequent applications for approval of cabin layouts by the Type Certificate holder, this is an obvious possibility. This certification substantiation approach has however, also been found acceptable by EASA for approval of cabin layouts designed and submitted for approval by any other suitably qualified organisation.

As explained above, due to the wording of the previous operational rule, in the past it was not particularly critical that the number of cabin crew associated with such a subsequent substantiation of continued compliance to CS 25.803 was highlighted by the design organisation. The provision of sufficient evenly distributed cabin crew seats to comply with at least the “one per 50 passenger seats” element of the operational rule was tacitly accepted as the only certification element of note in regards to number of cabin crew.

However, with the introduction of the new ORO.CC.100 operational rule, a higher emphasis on the assumptions underlying the emergency evacuation certification is required.

This is the intended consequence of the changes introduced with ORO.CC.100, namely that the minimum number of cabin crew determined by operators equates to the evacuation capability assumed for the aircraft airworthiness certification.



3.2. Unattended Emergency Exits – Safety Issues

3.2.1. Twin Aisle vs Single Aisle Aeroplanes

CS 25.803(a) requires that rapid evacuation must be possible, including cases where landing gear may have collapsed and/or the aeroplane may be on fire. It has long been EASA's position, as well as that of its predecessor National Airworthiness Authorities, that control of passengers in such situations cannot be assured if floor level exits are unattended by cabin crew members. If not discouraged by cabin crew members in the vicinity, passengers may for instance attempt to open an emergency exit into conditions of outside fire. If such a situation could occur an effective evacuation would not be possible and thus compliance with CS 25.803(a) would not be shown.

In single aisle aeroplanes, the distance between the left and right emergency exit of a pair is comparable to the distance between each emergency exit and the nearest passenger. Moreover, the cabin crew member, standing in the assist space, has direct view of the opposite emergency exit and a reasonable capability to stop the passenger flow to such exit, should this be required.

Conversely, on a twin aisle aeroplane, direct visibility of the emergency exit on the opposite side may not be assured due to more complex arrangements of interior components in the door areas. Furthermore, the large distance to the opposite exit and the multiple flow paths available to escaping passengers would make it very difficult, if not impossible, to stop the flow of passengers to the unsupervised emergency exit (i.e. that opposite to the one where the cabin crew member stands, if only one cabin crew member is stationed at an exit pair). Therefore, the risk that the opposite emergency exit will be operated by passengers when it should not be, or is not operated by cabin crew when it should be, is significantly higher.

Considering the distance separating two emergency exits of the same pair on a twin-aisle aeroplane, it is EASA's belief that it is not realistic to expect that a single cabin crew member will be capable of:

- simultaneously giving commands for the two emergency exits, including perhaps preventing passengers opening an emergency exit unsafe to use;
- reaching and operating the opposite emergency exit; and
- keeping control of the evacuation and of the passenger flows to both emergency exits of a pair.

Associated risks are adverse passenger behaviour in the absence of adequate supervision of the evacuation with a potentially negative impact on the evacuation rate and, in worst cases, on passenger survivability rate.

Given the above, EASA is of the opinion that the number of cabin crew on board should not be reduced to a point that would prevent the following being met;

- On a single aisle aeroplane, each pair of floor level emergency exits is supervised by at least one cabin crew member stationed near the exits.
- On a twin aisle aeroplane, each floor level emergency exit is supervised by at least one cabin crew member stationed near the exit (i.e. at least two cabin crew members per exit pair).

For an explanation of why non floor level exits are excluded, see Section 3.2.2.

3.2.2. Non Floor Level Emergency Exits

Type III and overwing Type II emergency exits may be configured with a step up inside the fuselage and in most cases a cabin crew member seat is not installed in the vicinity.

Type II exits with a step up inside the cabin, and Type III exits on Twin aisle aeroplanes are by regulation and/or feasibility always in overwing locations. Such a location reduces the immediate adverse safety



effects of inadvertent or unwise opening by passengers. This is because the wing will isolate the emerging passengers from outside conditions such as fire or adverse terrain/objects.

Although this is not an absolute mitigation, EASA is of the opinion that there is no general need to require cabin crew be stationed in the vicinity of these overwing emergency exits.

Type III exits on single aisle aeroplanes that are not located over a wing are acceptable and feasible, and such emergency exits are to be found on some current types. Such aeroplanes in current service are all configured with one pair of Type III exits, and one pair of larger floor level exits.

In the case of a seating capacity of 50 seats or fewer, i.e. the “one per 50 seats” element of the operational rule requiring only one cabin crew member, without a second cabin crew member being exceptionally required, passengers may unadvisedly evacuate through non overwing Type III exits directly into hazardous outside conditions.

With the previous operational rules in place, the question of whether or not this made safety sense did not arise because a clear allowance to reduce below any cabin crew number assumed in certification was given.

However, the new operational rule changes the emphasis on the certification aspects. After due consideration, and weighing of all factors, both safety and economic, EASA has concluded that there is insufficient justification to require a second cabin crew member seat in such cases.

In the case of a seating capacity of 51 seats or more, i.e. the “one per 50 seats” element of the operational rule requiring two cabin crew members, EASA is of the opinion that aeroplane cabin design should provide cabin crew member seats adjacent to each of the emergency exit pairs. This is in order to allow for the maximum use of the cabin crew members in supervising passenger behaviour in the vicinity of non-overwing Type III exits during an emergency evacuation.

3.3. Minimum Cabin Crew Number for Seating Capacities Lower than the Maximum Possible for the Aeroplane Type

3.3.1. Conventional Airline Cabin Layouts

In many cases the number of cabin crew members that would be assumed when performing an emergency evacuation demonstration or analysis for the maximum desired aeroplane type passenger seating capacity (i.e. the main demonstration or analysis performed by the TC applicant) may be in excess of that required for some lower seating capacities, even when taking into account the cabin crew supervision constraints defined in Section 3.2 above.

That is to say, the “one per 50 passenger seats” element of the operational rule, for the maximum desired seating capacity of the aeroplane type, may in fact require a number of cabin crew members in excess of that required for effective evacuation of the passengers, i.e. in excess of one per emergency exit pair (single aisle aeroplanes) or in excess of one per emergency exit (twin aisle aeroplanes).

This is due to the numerical values of the allowances for passenger seating capacity, per pair of installed emergency exits, as found in CS 25.807,

In such cases, a limited reduction in the number of cabin crew members assumed for certification, will be acceptable.

Examples to illustrate this point could be taken as follows;

Single Aisle Aeroplane Type

Four pairs of Type C emergency exits – allows for a maximum seating capacity of 220 passengers (ref CS 25.807).

“One per 50 seats” element of operational rule (ORO.CC.100) – requires 5 cabin crew members for this seating capacity.



However, a seating capacity of 200 or fewer seats – requires only 4 cabin crew members in accordance with “One per 50 seats” element of operational rule (ORO.CC.100).

4 cabin crew members would still allow one to be stationed adjacent to each pair of floor level emergency exits.

Thus two cases of cabin crew number (for two different maximum allowable passenger seating capacities, i.e. 220 and 200 seats) can be assumed in showing compliance to CS 25.803(c).

However, a reduction to 3 cabin crew members, for seating capacities of 150 seats or fewer would not be acceptable as this would lead to one pair of exits being unattended and thus compliance with CS 25.803(a), as explained above, would not be shown.

Twin Aisle Aeroplane Type

Four pairs of Type A emergency exits – allows for a maximum seating capacity of 440 passengers (ref CS25.807).

“One per 50 seats” element of operational rule (ORO.CC.100) – requires 9 cabin crew members.

However, a seating capacity of 400 or fewer seats – requires only 8 cabin crew members in accordance with “One per 50 seats” element of operational rule (ORO.CC.100).

8 cabin crew members would still allow one to be stationed adjacent to each floor level emergency exit.

Thus two cases of cabin crew number (for two different maximum allowable passenger seating capacities, i.e. 440 and 400 seats) can be assumed in showing compliance to CS 25.803(c).

However, a reduction to 7 cabin crew members, for seating capacities of 350 passenger seats or fewer (or 6 for 300 or fewer) would not be acceptable as this would lead to one (or two) emergency exit(s) being unattended and thus compliance with CS 25.803(a), as explained above, would be brought into question.

To the extent allowed, as explained above, the Type Certificate applicant for the aeroplane type thus has the option to provide an additional analysis for EASA acceptance, based on the demonstration or analysis data used for the highest passenger number substantiated, to substantiate compliance to CS 25.803 for the lower number of cabin crew members assumed present.

Such a lower number would also be acceptable as “the number of cabin crew members established during the aircraft certification process” in ORO.CC.100 (b) (1), and could also be that reported to the operator for their use in showing compliance to ORO.CC.100, if an appropriately lower number of passenger seats are installed.

3.3.2. Unusual Seating Layouts

Still further reductions in the minimum number of cabin crew, relative to that discussed in section 3.3.1 above, may be allowable but only in the case of unusual cabin layouts.

One case might be an aeroplane design combining part passenger and part main deck cargo compartment, i.e. the so called “Combi” layout, where some originally provided emergency exits are now unavailable in the cargo section of the fuselage.

It is obvious that a showing of compliance to CS 25.803 for the remaining limited passenger seating section of the fuselage will not need to assume as many cabin crew as for the full passenger version of the aeroplane.

As long as the lower limit on assumed cabin crew members, i.e. as related to their ability to be stationed adjacent to emergency exit pairs or emergency exits, as applicable, is not violated a pro rata reduction in assumed cabin crew number is acceptable. Furthermore, in such a conceptually simple change to the passenger cabin, similarity to the Type Certificate holder’s substantiation of compliance to CS 25.803 for whole cabin evacuation can still be used for the limited cabin portion remaining in use.



A more involved case might be that of a “VIP” aircraft with very much reduced seating capacity, but with seats designated for occupancy during take-off and landing remaining distributed essentially throughout the full length of the fuselage. In such cases it has been agreed that the much reduced passenger seating capacity results in an appreciably reduced burden of passenger management during an emergency evacuation and an associated increase in the ability of cabin crew members to prevent passengers from acting unwisely during an emergency evacuation. On such aircraft, it has in the past been agreed that a relaxation on the requirement to station cabin crew members adjacent to each emergency exit pair or emergency exit, as applicable (as discussed in Section 3.2) is appropriate. Such a case would be the subject of a specific discussions with the Agency, related to the specificities of the cabin layout in question.

In unusual seating layout cases such as those discussed above, the cabin crew number assumed should be detailed in the project specific substantiation documentation for compliance to CS 25.803. This approved lower number would be that meant by “the number of cabin crew members established during the aircraft certification process” in ORO.CC.100 (b) (1), and would be that reported to the operator for their use in showing compliance to ORO.CC.100.

4. Compliance Procedures

4.1. Determination of “the number of cabin crew Established During the Aircraft Certification Process” for Existing Aeroplane Cabin Approvals

As discussed above, prior to the introduction of the new ORO.CC.100 operational rule, there was no clear need for compliance substantiations to CS 25.803 to involve highlighting the number of cabin crew assumed be present on board.

This has led to the situation where the compliance documentation for many aeroplane cabin design approvals does not make any mention of the number of cabin crew that were assumed to be on board when compliance determinations were made.

In the light of this, EASA has reviewed the situation regarding existing cabin designs and has found that for the most part sufficient cabin crew seats have been installed to enable all floor level emergency exits to be attended by cabin crew, i.e. in accordance with the principles outlined in Section 3.2.1.

In the absence of compliance documentation which specifically mentions the number of cabin crew members assumed to be on board, a design organisation in possession of a design approval covering compliance to CS 25.803, if requested by an aeroplane operator for the number of cabin crew established during the aircraft certification process, may provide the number equating to the greater of the following two calculations;

1. One cabin crew member for every 50, or fraction of 50, passenger seats installed on the same deck of the aeroplane.
2. The number of cabin crew which enables,
 - for a single aisle aeroplane, each pair of floor level emergency exits to be supervised by one cabin crew member stationed near the exits.
 - for a twin aisle aeroplane, each floor level emergency exit to be supervised by one cabin crew member stationed near the exit (i.e. two cabin crew members per exit pair).

If on the other hand a design organisation, taking into account the above discussed certification principles, is of the opinion that a lower number than that resulting from 1. and 2. above is acceptable, the Agency should be contacted for advice on how to proceed.

In a few cases EASA has noted that existing cabin designs have been created with a number and positioning of installed cabin crew seats that does not enable cabin crew members to be stationed such that 2. above can be satisfied.



For instance, some twin aisle aeroplane cabins, of conventional airliner seating layout, have in the past been approved with only one cabin crew seat located in the vicinity of an emergency exit pair.

EASA is aware of only a small number of such designs and after due consideration has concluded that whilst the examples so far identified can be said to have not been the subject of a fully considered evacuation analysis covering all evacuation scenarios (i.e. of debatable compliance to CS 25.803(a)) this small number of identified examples does not constitute a situation requiring retroactive action in accordance with Part 21.A.3B.

A design organisation in possession of the design approval covering compliance to CS 25.803 for a cabin design which does not allow 2. above to be satisfied, particularly if requested by an aeroplane operator for the number of cabin crew established during the aircraft certification process, should contact the EASA for advice.

4.2. Determination of “the number of cabin crew Established During the Aircraft Certification Process” for Future Aeroplane Cabin Approvals

Design Organisations showing compliance to CS 25.803 should evaluate their proposed design for the ability of cabin crew to assure safe passenger behaviour in situations such as external fire, as required by CS 25.803(a).

In the case of conventional airline seating layouts, the Agency considers this to mean that at the least sufficient cabin crew seats should be provided to enable;

- for a single aisle aeroplane, each pair of floor level emergency exits to be supervised by at least one cabin crew member stationed near the exit.
- for a twin aisle aeroplane, each floor level emergency exit to be supervised by at least one cabin crew member stationed near the exit (i.e. at least two cabin crew members per exit pair).

Cabin crew member seats in addition to this may need to be provided to satisfy ORO.CC.100 (b)(3).

The minimum number of cabin crew thus assumed to be present on board (i.e. occupancy of the seats defined above) should be clearly indicated in the certification documentation showing compliance to CS 25.803.

Furthermore, this number is that which should be provided to an aeroplane operator were they to request the number of cabin crew established during the aircraft certification process.

This is not intended to dissuade an applicant from seeking approval for a design that does not meet these criteria if they feel that the specific design warrants a different approach (for example VIP aeroplanes of much reduced seating capacity). However, this must be justified within the certification principles outlined in this Certification Memorandum. Irrespective of any other aspects, such a design should be classified as a Major change.

4.3. Who this Certification Memorandum affects

Applicants for and holders of EASA approvals for aeroplane cabin designs involving showing of compliance to CS/JAR/FAR 25.803. Both EU and non-EU design organisations are affected by this Certification Memorandum.

5. Remarks

1. This EASA Proposed Certification Memorandum will be closed for public consultation on the **28th of October 2015**. Comments received after the indicated closing date for consultation might not be taken into account.



2. Comments regarding this EASA Proposed Certification Memorandum should be referred to the Certification Policy and Safety Information Department, Certification Directorate, EASA. E-mail CM@easa.europa.eu or fax +49 (0)221 89990 4459.

3. For any question concerning the technical content of this EASA Proposed Certification Memorandum, please contact:

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