Comment-Response Document 2012-13

Additional airworthiness requirements for operations

CRD TO NPA 2012-13 — RMT.0110 (21.039(k)) — 27/05/2013

Related draft Opinion of the European Aviation Safety Agency for a Commission Regulation (EU) No …/… on additional airworthiness requirements for operations

and for amending Commission Regulation (EU) No 965/2012 laying down requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council

and draft Decision of the Executive Director of the European Aviation Safety Agency for additional airworthiness specifications for operations (CS-26)

EXECUTIVE SUMMARY

This Comment-Response Document (CRD) contains the comments received on NPA 2012-13 (published on 13 September 2012) and the responses provided thereto by the Agency.

Many of the comments relate to the compatibility of the proposed Part-26 and CS-26 provisions with earlier versions of the relevant certification standards. The Agency confirmed the compatibility of these standards and where necessary included references or amended the text.

Several comments questioned the appropriateness of the transition period. The Agency considers the transition period adequate because:

— the length of the rulemaking process provides enough early warning;
— Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators;
— most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

Some comments were made with regard to demonstration of compliance to the new rules by the operators. This topic is now further clarified in additional guidance material.

With regard to the 2007 rulemaking procedure: Based on the comments and responses, the Agency developed the revised draft Regulation and CS, which is presented in this CRD.

Applicability		Process map	
Affected regulations and decisions:	Part-26, CS-26	Concept Paper:	No
		Rulemaking group:	No
		RIA type:	Light
Affected stakeholders:	Design organisations, commercial air operators	Technical consultation during NPA drafting:	Yes
		Publication date of the NPA:	13/09/2012
Driver/origin:	Safety	Duration of NPA consultation:	3 months
		Review group:	No
Reference:		Focussed consultation:	No
		Publication date of the Opinion:	2013/Q3
		Publication date of the Decision:	2013/Q3

Explanatory Note

I. General

1. The purpose of the Notice of Proposed Amendment (NPA) 2012-13, dated 13 September 2012 was to propose a draft Opinion of the European Aviation Safety Agency for a Commission Regulation on additional airworthiness requirements for operations and for amending Commission Regulation (EU) No 965/2012, laying down requirements and administrative procedures related to Air Operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, and a draft Decision of the Executive Director of the European Aviation Safety Agency for additional airworthiness specifications for operations (CS-26).

II. Consultation

2. The draft Opinion and draft Executive Director Decision were published on the Agency's website (http://www.easa.europa.eu) on 13 September 2012.

   By the closing date of 13 December 2012, the European Aviation Safety Agency (hereinafter referred to as the 'Agency') had received 54 comments from 14 national aviation authorities, professional organisations and private companies.

III. Publication of the CRD

3. All comments received have been acknowledged and incorporated into this Comment-Response Document (CRD) with the responses of the Agency.

4. In responding to comments, a standard terminology has been applied to attest the Agency's acceptance of the comment. The terminology is as follows:

   Accepted — The comment is agreed by the Agency and any proposed amendment is wholly transferred to the revised text.

   Partially accepted — Either the comment is only agreed in part by the Agency, or the comment is agreed by the Agency but any proposed amendment is partially transferred to the revised text.

   Noted — The comment is acknowledged by the Agency but no change to the existing text is considered necessary.

   Not accepted — The comment or proposed amendment is not shared by the Agency.

   The resulting text highlights the changes as compared to the NPA text.

5. The Agency Opinion will be issued at least two months after the publication of this CRD to allow for any possible reactions of stakeholders regarding possible misunderstandings of the comments received and answers provided.

6. Such reactions should be received by the Agency not later than **29 July 2013** and should be submitted using the Comment-Response Tool available at **http://hub.easa.europa.eu/crt**.

7. The Executive Director Decision on CS-26 will be only published when the Commission Regulation, based on the Agency Opinion, is published in the *Official Journal of the European Union*.

IV. CRD table of comments, responses and resulting text

(General Comments)	-

comment	*1* comment by: *ICAO* The requirements of Annex 6 to the Convention on International Civil Aviation regarding the use of Halon as a fire extinguishing agent should be address in Part 26 (Ex: Annex 6 Part 1,Chapter 6.2.2.1).
response	*Accepted* A dedicated rulemaking task has been initiated for this issue: RMT.0560 'Halon: Update of Part 26 to comply with ICAO Standards', whose ToR are due to be published soon.

comment	*6* comment by: *Luftfahrt-Bundesamt* The LBA has no comments on NPA 2012-13.
response	*Noted*

comment	*16* comment by: *Dassault Aviation* Dassault Aviation understand the needs to establish retroactive requirements in the sake of safety. General comment No provision was found regarding equivalence of safety and/or exemptions/deviations to Part 26 and/or CS 26. From the table in section VI sub-section 31, it is understood that it is the EASA intent to allow such deviations according to the general provisions of Part 26.35. Unfortunately, there is no Part 26.35 in this NPA. This provision being an important element of the rule, it is suggested to re-circulate the NPA with its Part 26.35
response	*Not accepted* The provision allowing demonstration of compliance using special conditions or the concept of equivalent safety is included in Part 26.30(b). The possibility for exemptions is addressed in Article 14 of Regulation (EC) No 216/2008.

comment	*29* comment by: *UK CAA*

	Please be advised that the UK CAA does not have any comments to make on NPA 2012-13, Additional Requirements for Operations.
response	*Noted*

comment	*30* comment by: *DGAC France* The French DGAC wishes to highlight the following comments : 1. 1) Entry into force and Applicability : The NPA indicates that this regulation will be directly applicable after its entry into force (which occurs 20 days after its publication). On top of that, most requirements (all but one) will only be applicable one year after the entry into force. This schedule is made clear but our interrogation concerns the interaction between these provisions and the applicability of the IR-OPS in the different MS. Since this new regulation (Part - 26) will be referred to in the ORO Part of the IR-OPS, our conclusion is that the latest date between the date of applicability of the Part – 26 and the date of applicability of IR-OPS regulation in each MS should be taken into account. Could this interpretation be confirmed? 2. 2) Demonstration of compliance : Article 26.30 of Part – 26 specifies that operators may demonstrate compliance with the requirements of this Part by complying with the detailed specifications issued by the agency or the equivalent specifications issued by the Agency under 21.A.16A or technical standards offering an equivalent level of safety as those included in the specifications. In the case where operators choose to show compliance with the detailed specifications, could we have more details on how this could be performed? Will there be a common format for all member states that operators could use to prove their compliance? Or should each member state set up a compliance procedure? Or else should it be left to the operators to get themselves organized by any means they consider as suitable?
response	*Noted* 1) Not accepted. Part-26 will be applicable independently of any requirement in the IR-OPS. The amendment to ORO.AOC.100 is meant to enhance the enforcement tools, but without it Part-26 will be still applicable. 2) Noted. The operators will be responsible for showing compliance. In most cases this can be done by referring to the certification basis of the aircraft or the approved changes in which the amendment level of the certification specification will indicate compliance. In any case, the JAR-26 requirements should have been implemented already by EU operators and since the CS-26 text is equivalent to the JAR-26 text, compliance with JAR-26 means also compliance with Part-26. See also Article 5 of the cover Regulation. Compliance may also be shown with the help from the relevant design approval holder by referring to the certification documents that were used for obtaining the design approval. In the rare case where the above possibilities are not sufficient, showing compliance by the operator directly to the NAA will be difficult. They will need to involve the design approval holder of the aircraft or the approved change as relevant. This design approval holder should then apply to the Agency for certification that the design complies with the relevant CS-26 or CS-25

paragraph, special condition or equivalent safety case. With that approval the operator can show compliance to the NAA.

comment

34 comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

· We would like to emhasize the importance of that the time aspect when introducing Part 26 and CS 26 have been considered enough, in order to avoid unreasonable impact for operators.

response

Noted

As explained in the NPA, the proposed transition periods take into account the fact that JAR-26 should have been implemented by all EU operators.

comment

39 comment by: *FAA*

The definition for class B and class D cargo compartments appears to have changed from those defined in CS-25. If this change was intentional, please explain to avoid confusion.

response

Noted

The definition of Class B in the proposed regulation was aligned with the definition in the CS-25 amendment that was valid when the last version of JAR-26 was issued. It has evolved in the meantime. The Agency agrees to bringing it in line with the latest version of CS-25.
The definition of Class D is in line with the definition in CS-25 Amendment 2. It was deleted from CS-25 by Amendment 3.

EXECUTIVE SUMMARY p. 2

comment

15 comment by: *CAA-NL*

Please be advised that the Netherlands supports the objectives of this NPA and has no detailed comments.

response

Noted

A. Explanatory Note - I. General p. 4

comment	*37* comment by: *General Aviation Manufacturers Association (GAMA)* EASA is proposing to apply the requirements of this NPA to "newly produced or in-service aircraft". It is GAMA's view that this is an innappropriate distinction as newly produced aircraft are in fact in-service aircraft. If EASA meant to address changes to type certified aircraft prior to initial airworthiness, part/CS-26 would be the appropriate regulatory vehicle, however, this distinction needs to be clarified.
response	*Noted* This text is not a regulatory text but an explanation of how the scope and applicability of Part-26 and CS-26 may evolve in the future. When the scope will be extended this will be done through dedicated NPAs where there will be the opportunity to comment on terminology.

A. Explanatory Note - IV. Content of the draft Opinion/Decision p. 6-8

comment	*36* comment by: *General Aviation Manufacturers Association (GAMA)* GAMA believes new airworthiness requirements for yet to be certified products must be addressed by assuring that items included in CS-26 are also addressed by an amendment to CS-25. It would be innappropriate to hold new design requirements only in CS-26 as this section is focused on making changes to the exisiting fleet.
response	*Accepted* The Agency agrees with the comment; it reflects the intent of the Agency.

comment	*38* comment by: *General Aviation Manufacturers Association (GAMA)* GAMA notes that EASA is creating a vehicle for retroactive airworthiness requirements for CS-23, 27 & 29 vehicles. Historically the JAR-26 (as well as the existing FAA 14CFR§26 framework) has applied only to transport category aircraft (CS-25) because of the public nature of scheduled commercial air carriers. It's essential that EASA take an abundance of caution prior to extending the use of retroactive requirements to operations such as general aviation due to the cost sensitive nature and much lower public safety impact.
response	*Noted* Part-26/CS-26 will be the regulatory means to impose additional airworthiness requirements on existing designs. It is true that traditionally these have focused on commercial air transport. However, it is not excluded that in the

	future certain measures will also apply to general aviation. This will depend on the risk that is addressed and the potential safety benefit as well as other impacts. In any case, all proposals will be accompanied by a Regulatory Impact Assessment (RIA).

A. Explanatory Note - VI. Differences introduced in Part-26 and CS-26 p. 8-11

comment	*40* comment by: *General Aviation Manufacturers Association (GAMA)* GAMA is pleased to see that EASA is working to align the retroactive requirements for an exit sign contained within JAR 26.120 with the ability to use symbolic signs as detailed in the current CS-25.
response	*Noted*

A. Explanatory Note - VII. Future Part/CS-26 rulemaking p. 11

comment	*41* comment by: *General Aviation Manufacturers Association (GAMA)* GAMA is pleased to see that EASA is taking a pragmatic approach to reviewing each of these technical issues rather than incuding all of these issues in this NPA through a blanket approach. Many of these items are complicated and require a thoughtful approach in order to assure they are appropriately addressed. GAMA looks forward to working with EASA on each of these rulemaking tasks individually.
response	*Noted*

A. Explanatory Note - VIII. Regulatory Impact Assessment p. 11-14

comment	*14* comment by: *KLM EASA DOA 21J.012* The economic impact is only low if the agency confirms that the wording difference mentioned in the comments below do not result in non-compliances. In addition acceptance of TC holder provided e-mail statements is required to avoid significant costs.
response	*Noted*

The intent of the proposal was to transpose the existing JAR-26 requirements. If the aircraft already complied with JAR-26, it should also comply with Part-26. See also Article 5 of the cover Regulation.
Normally, compliance has to be demonstrated to the Agency which will then result in an approval. However, in some cases TC holder statements by e-mail can be accepted if it is within the scope of their DOA to make such statements.

comment *24* comment by: *KLM EASA DOA 21J.012*

As long as the CAA-NL has not issued a "JAR-26 amendment 3" compliance statements it is not assured that the Economical Impact is Low

response *Not accepted*

JAR-26 should have been implemented in all EU Member States under the JAA Cyprus Arrangements. Moreover, JAR-OPS-1, which should also have been implemented, required compliance with JAR-26. This was copied in EU-OPS (OPS 1.005(b)) even though 'JAR-26' was replaced by the 'applicable retroactive airworthiness requirements'. The agreed interpretation of this term was that it referred to the JAR-26 provisions as incorporated into national law. Since the issuance of EU-OPS on 11/12/2007 the EASA OPS standardisation visits to Member States have included compliance with JAR-26.

comment *42* comment by: *General Aviation Manufacturers Association (GAMA)*

It is evident that EASA has a response on compliance from less than 50% of the EASA member (27+3) states. GAMA believes EASA is able to locate the remaining 19 countries which have yet to respond to assure that the burden/impact of this rule is fully understood.
Additionally EASA assumes that the fleet accross Europe is 7,909 aircraft. Historically, JAR-26 (as well as FAA 14CFR§26) has only applied to large aircraft in scheduled airline service. GAMA requests that EASA ensure that their estimate of the European fleet includes all registered CS-25 aircraft (including business jets) which may not have been made compliant through local implementation of JAR-26.
EASA must consider proportionality when looking at the range of those who operate CS-25 aircraft to include: large scheduled carriers, small scheduled carriers, non-scheduled commercial operators of all sizes, business operators of general aviation of all sizes with consideration of the number of passengers carried in all cases as a measure of benefit/impact. Has EASA determined NAA implementation of JAR-26 requirements on transport category business jets?

response *Noted*

The fleet size of 7 909 aircraft includes the commercially operated large aeroplanes within the remit of the Agency.
Regarding the implementation for business jets, the Agency considers that even if there was not 100 % compliance with JAR-26, the proposed rule and transition period provide a proportionate regulatory measure taking into account that:

— the required measures are all safety issues;
— the length of the rulemaking process provides enough early warning;
— Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators;
— most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - I. Draft Opinion Part-26 - Cover Regulation p. 15-18

comment *31* comment by: *Bombardier Aerospace*

Article 5 states that JAR-26-compliant aircraft are considered compliant with the regulation. The intent is that there is no need to recertify existing JAR-26-compliant aircraft to Part-26/CS-26 requirements, which we are in agreement with. However, it is unclear if the proposed wording here and in Part-26.30 allow new amendments to CS-26 to be applied to these existing aircraft in the future without revising the regulation. We suggest emphasizing that JAR-26 is equivalent to Part-26 and CS-26 at amendment 0, but that all aircraft must comply with future changes to CS-26.

response *Partially accepted*

It is indeed the intent of the proposal that for the transposed JAR-26 measures there is no need to do any re-certification. This is addressed by Article 5 of the cover Regulation. If there would be a need to require something on top of that, this should be reflected in Part-26.

comment *43* comment by: *General Aviation Manufacturers Association (GAMA)*

GAMA believes that the implementing regulation may not be the appropriate place to include specific definitions. Definitions should not be in IR-26 but rather in CS-26 to assure appropriate flexibility with appropriate justification.

response *Not accepted*

Since the terms are used in the Implementing Rule, they also have to be defined in the Implementing Rule.

comment *44* comment by: *General Aviation Manufacturers Association (GAMA)*

GAMA is pleased to see EASA taking a pragmatic approach to recognize operators who have complied with JAR-26. As part of providing guidance to the transition provision, GAMA encourages EASA to include information to operators on a reasonable approach to compliance evidence to the previous JAR-26 for credit under Part/CS-26.

response | *Accepted*

See also response to comment No 30. The explanation given there is also included in the Guidance Material (GM1 26.30).

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.50 p. 19

comment | *25* comment by: *Embraer - Indústria Brasileira de Aeronáutica - S.A.*

Embraer offers the following comments in response to NPA 2012-13, Additional Airworthiness Specifications for Operations (CS-26):
1) Part 26.50 and CS 26.50 - While the language of both is consistent with existing JAR 26, Embraer suggests that EASA revise both to apply the standard only to *required* cabin crew member seats. In business jets with Maximum Operational Passenger Seating Capacities of 19 or below, where a cabin crew member is not required by the applicable operating rules, any optionally installed cabin crew member seat is not required to meet CS 25.785 for certification. The provision of these optional seats still contribute significantly to safety because they are typically located close to the main entrance door where the cabin crew member can quickly open emergency exit. In addition, the seat is typically well protected, aft facing, and provided with dual shoulder harnesses.
With the applicability of Part 26.50 to these seat installations, compliance would now be required to be shown to CS 25.785(h), (j), and (k). Given the difficulty is complying with the direct-view requirements of CS 25.785(h)(2) and FAA Advisory Circular 25.785-1A in business jets interiors, the applicability of Part 26.50 to nonrequired cabin crew seats gives the manufacturer and/or operator a disincentive to install these seats, which is not in the interest of safety for the reasons explained above.
Embraer recommends that Part 26.50 be revised to say "... Operators of large aeroplanes used in commercial air transport, type certificated on or after 1 January 1958, shall ensure, not later than [one year after the entry into force of this Regulation], that each flight or required cabin crew member seat and its restraint system are configured in order to provide ..." and revise paragraph (b) of CS 26.50 to say:
(b) Each required cabin crew member seat located in passenger compartments~~, excluding passenger seats occupied by cabin crew members not required by Part-ORO.CC.100,~~ is equipped with a restraint system consisting of a combined safety belt and shoulder harness unit with a single point release. Each combined safety belt and shoulder harness is equipped with a means to secure it, when not in use, to prevent interference with rapid egress in an emergency. In addition,
(1) to the extent possible, without compromising their proximity to required floor level emergency exits, required cabin crew seats are located to provide a direct view of the cabin area for which the cabin crew member is individually responsible, except that for aeroplanes with a certification basis prior to JAR 25.785 at Change 8 (or FAR Part 25, §25.785, at Amendment 25-51 respectively), required cabin crew member seats need not be re-located to meet that condition if an indirect view into the passenger cabin is given by a mirror.

	(2) required cabin crew member seats are:
response	*Partially accepted* The Part-26 text is generic enough to allow different solutions of seats and restraint systems, depending on the function of the crew. The text of CS 26.50(b) is reformulated and made consistent with (c) taking into account the comment.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.100 p. 19-20

comment	*17* comment by: *Dassault Aviation* Dassault-Aviation comment on Part 26.100 & CS 26.100: It is recommended to remove Part 26.100 and CS 26.100 from this NPA and postpone it to a later issue of Part 26 / CS 26. The reason for this recommendation is that RMT0264 (Executive Interiors) is working on the same subject and could conclude on a different rule proposal. Postponing Part 26.100 and CS 26.100 will permit to ensure rule consistency.
response	*Not accepted* Since the Part-26 requirement is not prescriptive it will allow for a range of solutions to demonstrate compliance. One of the solutions will be to comply with the prescriptive standard in CS-26 but there may be alternative solutions that can be acceptable in accordance with Part 26.30(b)(2).

comment	*45* comment by: *General Aviation Manufacturers Association (GAMA)* EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.
response	*Not accepted* The Agency considers that one year implementation time is enough taking into account: — the length of the rulemaking process which provides enough early warning; — Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators; — most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.105 p. 20

comment	*18* comment by: *Dassault Aviation* Dassault-Aviation comment on Part 26.105: It is recommended to clarify that access to emergency exits is required only in case of an emergency evacuation. Experience shows that even though it seems obvious, there is always a risk that someone will misinterpret this requirement as being applicable in all phases of flight.
response	*Accepted* The wording 'in case of an emergency evacuation' has been added to the Part-26 requirement.

comment	*45* ❖ comment by: *General Aviation Manufacturers Association (GAMA)* EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.
response	*Not accepted* The Agency considers that one year implementation time is enough taking into account: — the length of the rulemaking process which provides enough early warning; — Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators; — most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.110 p. 20

comment	*45* ❖ comment by: *General Aviation Manufacturers Association (GAMA)* EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.
response	*Not accepted*

The Agency considers that one year implementation time is enough taking into account:
— the length of the rulemaking process which provides enough early warning;
— Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators;
— most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.120 p. 20

comment

45 ❖ comment by: *General Aviation Manufacturers Association (GAMA)*

EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.

response

Not accepted

The Agency considers that one year implementation time is enough taking into account:
— the length of the rulemaking process which provides enough early warning;
— Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators;
— most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.150 p. 20

comment

19 comment by: *Dassault Aviation*

Dassault-Aviation comment on Part 26.150(b):
This single paragraph addresses the case where smoking is permanently prohibited and the case where smoking is temporarily prohibited. As a result, it can be understood as requiring an illuminated sign operable from the flight crew even if smoking is to be permanently prohibited. It is not believed that it is the intent. It is recommended to better separate the two cases to clarify what is required in each case.

response

Accepted

The requirement is slightly amended to make clear that illuminated signs operable from the cockpit are only required if smoking is allowed. The CS 26.150 specification was already clear in that respect.

comment	*45* ❖ comment by: *General Aviation Manufacturers Association (GAMA)* EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.
response	*Not accepted* The Agency considers that one year implementation time is enough taking into account: — the length of the rulemaking process which provides enough early warning; — Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators; — most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.155 p. 20

comment	*45* ❖ comment by: *General Aviation Manufacturers Association (GAMA)* EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.
response	*Not accepted* The Agency considers that one year implementation time is enough taking into account: — the length of the rulemaking process which provides enough early warning; — Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators; — most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.160 p. 21

comment	*45* ❖ comment by: *General Aviation Manufacturers Association (GAMA)*

	EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.
response	*Not accepted* The Agency considers that one year implementation time is enough taking into account: — the length of the rulemaking process which provides enough early warning; — Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators; — most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.200 p. 21

comment	*45* ❖ comment by: *General Aviation Manufacturers Association (GAMA)* EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.
response	*Not accepted* The Agency considers that one year implementation time is enough taking into account: — the length of the rulemaking process which provides enough early warning; — Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators; — most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Opinion - Annex I - Part-26 - 26.250 p. 21

comment	*20* comment by: *Dassault Aviation* Dassault-Aviation comment on part 26.250: It should be clarified that this requirement does not apply to commercial air transport aeroplanes where a flight crew compartment door is not installed.
response	*Accepted*

Clarification is added indicating that this requirement does not require a door; it only has a particular requirement for a door operating system, if one is installed.

comment

45 ❖ comment by: *General Aviation Manufacturers Association (GAMA)*

EASA proposes a 1-year entry into force on this requirement. As previously discussed, GAMA questions EASA analysis of JAR-26 compliance accross Europe and therefore a 1-year entry into force may be too short a time frame once an accurate analysis is completed.

response

Not accepted

The Agency considers that one year implementation time is enough taking into account:
— the length of the rulemaking process which provides enough early warning;
— Part-26 is a transposition of existing JAR-26 which should have been applied by all EU operators;
— most of the requirements originate from technological and regulatory developments that date back to more than 10–15 years.

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 1 - CS 26.5 p. 23-24

comment

2 comment by: *Boeing*

Page: 23
Paragraph: *CS 26.5 -- Seats, berths, safety belts, and harnesses*

EDITORIAL COMMENT ONLY
The proposed title of this section states:
"CS 26.5 Seats, berths, safety belts, and harnesses"
REQUESTED CHANGE: (underline indicates add)
*"CS 26.~~5~~ **50** Seats, berths, safety belts, and harnesses"*

JUSTIFICATION: Correct the paragraph number to correspond with the CS-26 paragraph number for this section.

response

Accepted

comment

5 comment by: *CAA CZ*

The provision CS 26.110(d)(3) does not specify the form of the "universal symbolic exit sign". To avoid different interpretations of its form, we recommend to specify the form of the universal symbolic exit sign by reference to the specific international standard for graphic marking of emergency exits.

response *Accepted*

A new GM1 26.110(d) is introduced referring to the existing AMC 25.812(b)(1) which contains guidance on symbolic exit signs.

comment *8* comment by: *KLM EASA DOA 21J.012*

REF: CS 26.50(a)
General:
It seems that ***CS 25.785(g)*** has been omitted as a possible means to demonstrate compliance with the mentioned requirements for seats at a flight deck station (CS 26.50(a)).
A ***"combined safety belt and shoulder harness with a single-point release that permits the flight deck occupant, when seated with safety belt and shoulder harness fastened, to perform all of the occupant's necessary flight deck functions***" is not required per CS25 Amdt 12 (although this is an operational requirement in EU OPS).
This makes CS-26 more stringent than CS-25.
Note: requirement was introduced into FAR25.785 with Amdt 25-51 (6 Mar.'80).
As a ***"combined safety belt and shoulder harness with a single-point release that permits the flight deck occupant, when seated with safety belt and shoulder harness fastened, to perform all of the occupant's necessary flight deck functions***" is not required according to JAR25 and FAR 25 prior to Amdt 25-51, it is not called out in the EASA TC basis for e.g. 747-400, 777-200/-300, A330-200/-300 and 737-700/-800/-900).
A "***means to secure each combined safety belt and shoulder harness, when not in use, to prevent interference with the operation of the aeroplane and with rapid egress in an emergency***" is not required for a/c types with FAA TC prior to Amdt 25-51 (e.g. 747-400).
It was introduced into FAR25.785 with Amdt 25-51.
The requirement is not called out in the rule text of CS25.785(g). However, it is mentioned in AMC 25.785(g) only.
These items should be treated in the same way, i.e. either incorporate in rule text of CS-25 and (then) in CS26 **or** in Guidance Material of both specifications only (i.e. CS-25 and CS-26).

response *Accepted*

CS 25.785(g) is added as a possible means of complying with Part 26.50.

comment *26* comment by: *Embraer - Indústria Brasileira de Aeronáutica - S.A.*

Embraer offers the following comments in response to NPA 2012-13, Additional Airworthiness Specifications for Operations (CS-26):

1) Part 26.50 and CS 26.50 - While the language of both is consistent with existing JAR 26, Embraer suggests that EASA revise both to apply the standard only to *required* cabin crew member seats. In business jets with Maximum Operational Passenger Seating Capacities of 19 or below, where a cabin crew member is not required by the applicable operating rules, any optionally installed cabin crew member seat is not required to meet CS 25.785 for certification. The provision of these optional seats still contribute significantly to safety because they are typically located close to the main entrance door where the cabin crew member can quickly open emergency exit. In addition, the seat is typically well protected, aft facing, and provided with dual shoulder harnesses.
With the applicability of Part 26.50 to these seat installations, compliance would now be required to be shown to CS 25.785(h), (j), and (k). Given the difficulty is complying with the direct-view requirements of CS 25.785(h)(2) and FAA Advisory Circular 25.785-1A in business jets interiors, the applicability of Part 26.50 to nonrequired cabin crew seats gives the manufacturer and/or operator a disincentive to install these seats, which is not in the interest of safety for the reasons explained above.
Embraer recommends that Part 26.50 be revised to say "... Operators of large aeroplanes used in commercial air transport, type certificated on or after 1 January 1958, shall ensure, not later than [one year after the entry into force of this Regulation], that each flight or required cabin crew member seat and its restraint system are configured in order to provide ..." and revise paragraph (b) of CS 26.50 to say:
(b) Each required cabin crew member seat located in passenger compartments~~, excluding passenger seats occupied by cabin crew members not required by Part-ORO.CC.100,~~ is equipped with a restraint system consisting of a combined safety belt and shoulder harness unit with a single point release. Each combined safety belt and shoulder harness is equipped with a means to secure it, when not in use, to prevent interference with rapid egress in an emergency. In addition,
(1) to the extent possible, without compromising their proximity to required floor level emergency exits, required cabin crew seats are located to provide a direct view of the cabin area for which the cabin crew member is individually responsible, except that for aeroplanes with a certification basis prior to JAR 25.785 at Change 8 (or FAR Part 25, §25.785, at Amendment 25-51 respectively), required cabin crew member seats need not be re-located to meet that condition if an indirect view into the passenger cabin is given by a mirror.
(2) required cabin crew member seats are:

2) CS 26.5 should read CS 26.50.

response *Partially accepted*

The Part 26 text is generic enough to allow different solutions of seats and restraint systems, depending on the function of the crew.
The text of CS 26.50(b) is reformulated and made consistent with (c) taking into account the comment.

comment *32* comment by: *Bombardier Aerospace*

	CS 26.5 should be "CS 26.50".
response	*Accepted*

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 1 - CS 26.100 p. 24

comment	*3* comment by: *Boeing* Page: 24 Paragraph: *CS 26.100 – Location of emergency exits* The proposed text states: *"…If one or more emergency exit is deactivated, the distance(s) between the remaining exits is at least 18.3M (60 feet)…"* **REQUESTED CHANGE (strike through indicates delete and underline indicates add):** *"…If one or more emergency exit is deactivated, the distance(s) between the remaining exits is ~~at least~~ **no more than** 18.3M (60 feet)…"* **JUSTIFICATION:** As proposed in the NPA, the requirement could be read to mean that 18.3M or more between the exits is acceptable as long as 18.3M is met. The intent was to ensure that the maximum distance between the exits was 18.3M. Our requested revision would clarify this.
response	*Accepted*

comment	*17* comment by: *Dassault Aviation* Dassault-Aviation comment on Part 26.100 & CS 26.100: It is recommended to remove Part 26.100 and CS 26.100 from this NPA and postpone it to a later issue of Part 26 / CS 26. The reason for this recommendation is that RMT0264 (Executive Interiors) is working on the same subject and could conclude on a different rule proposal. Postponing Part 26.100 and CS 26.100 will permit to ensure rule consistency.
response	*Not accepted* Since the Part-26 requirement is not prescriptive it will allow for a range of solutions to demonstrate compliance. One of the solutions will be to comply with the prescriptive standard in CS-26 but there may be alternative solutions that can be acceptable in accordance with Part 26.30(b)(2).

comment	*27* comment by: *Embraer - Indústria Brasileira de Aeronáutica - S.A.* 3) CS 26.100 should read "... the distance(s) between the remaining exits is no more than ~~at least~~ 18.3 m (60 feet) from any adjacent passenger emergency exit on the same side of the same deck of the fuselage, ..."
response	*Accepted*

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 1 - CS 26.110 p. 24-26

comment *7* comment by: *KLM EASA DOA 21J.012*

CS 26.110 Emergency exit markings	**Comment**
CS 26.110(e)(2)(i)	The specified ***minimum illumination level*** is not required per CS-25. This makes CS-26 more stringent than CS-25. It is proposed to change wording to match with wording of CS-25.
CS 26.110(e)(4)	Ref. GM1 26.1 "... compliance with applicable requirements, which shall be assessed by the competent authority". Wording of proposed CS-26 slightly deviates from wording of FAR25.811(e)(4) at Amdt 25-59. To avoid interpretation differences for some older a/c types (e.g. 747-400), please confirm that requirements of FAR25.811(e)(4) at Amdt 25-59 are considered equivalent with proposed CS-26, and can therefore be accepted to show compliance with CS-26.

response *Accepted*

(e)(2)(i): Accepted; the wording is aligned with CS-25.
(e)(4): The Agency confirms that compliance with FAR 25.811(e)(4) at Amdt 59 is considered acceptable for compliance with CS 26.110(e)(4).

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 1 - CS 26.120 p. 26-28

comment 9 comment by: *KLM EASA DOA 21J.012*

CS 26.120 Interior emergency lighting and emergency light operation	Comment
CS 26.120(b)	Ref. GM1 26.1 "... compliance with applicable requirements, which shall be assessed by the competent authority". Wording of proposed CS-26 slightly deviates from wording of FAR25.812(e) at Amdt 25-31. To avoid interpretation differences for some older a/c types (e.g. 747-400), please confirm that requirements of FAR25.812(e) at Amdt 25-31 are considered equivalent with proposed CS-26, and can be accepted to show compliance with CS-26. This applies to:
CS 26.120(b)(3)	(b)(3): "***at either station***".
CS 26.120(b)(5)	(b)(5): "***cockpit control device … 'on', 'off', and 'armed' position***".
CS 26.120(c)(1)(i) CS 26.120(c)(2) CS 26.120 (d)(1)(i) CS 26.120 (d)(1)(ii)	The specified ***minimum illumination level*** is not required per CS25. This makes CS-26 more stringent than CS-25. In addition, it is not clearly stated that this requirement applies to self-illuminating signs only. It is proposed to change wording to match with wording of CS-25.

response *Accepted*

(b) The Agency confirms that compliance with FAR 25.812(e) at Amdt 25-31 is accepted from showing compliance to Part 26.120.
(c) and (d): The Agency agrees to delete the minimum illumination level requirement.

comment 21 comment by: *Dassault Aviation*

Dassault-Aviation comment on CS 26.120(a)(1):
CS 25.812 (a) includes exterior emergency lighting in the emergency lighting system, but CS 26.120 (a)(1) does not. In the sake of rule consistency, the same emergency lighting system definition should be used for CS 26 and for CS 25. Otherwise, an airplane complying with CS 25 could be in non compliance with CS 26.

response *Not accepted*

In the example given, CS-25 is more demanding than CS-26, which should not be a problem.

comment *28* comment by: *Embraer - Indústria Brasileira de Aeronáutica - S.A.*

4) The JAR 26.120(a)(2) requirement for floor proximity emergency escape path lighting is applicable only to airplanes with maximum approved passenger seating configurations of more than 19 passengers. The proposed Part 26.120 and CS 26.120(a)(2) requirements are applicable to all large airplanes. We believe that it was EASA's intention to carry forward the same passenger limit as JAR 26.

response *Accepted*

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 1 - CS 26.150 p. 28-29

comment *10* comment by: *KLM EASA DOA 21J.012*

CS 26.150 Compartment interiors	**Comment**
CS 26.150(c)(1)	Similar or equivalent requirements with regards to ***Heat Release*** do not exist in EASA/FAA TC basis of several older a/c types (e.g. 747-400). It is difficult, if not impossible, for an operator to show compliance, other than via ***TC Holder's statement***. Acceptance of TC Holder's e-mail statement is required to avoid significant economic impact. Please confirm that e-mail compliance statements of TC Holders are acceptable for showing compliance with CS-26.

CS 26.150(c)(2)	Similar or equivalent requirement with regards to ***Heat Release and Smoke Density*** do not exist in EASA/FAA TC basis of several older a/c types (e.g. 747-400). It is difficult, if not impossible, for an operator to show compliance, other than via ***TC Holder's statement***. Acceptance of TC Holder's e-mail statement is required to avoid significant economic impact. Please confirm that e-mail compliance statements of TC Holders are acceptable for showing compliance with CS-26.

response *Partially accepted*

The operators will be responsible for showing compliance. In most cases this can be done by referring to the certification basis of the aircraft or the approved changes in which the amendment level of the certification specification will indicate compliance. In any case, the JAR-26 requirements should have been implemented already by EU operators and since the CS-26 text is equivalent to the JAR-26 text, compliance with JAR-26 means also compliance with Part-26. See also Article 5 of the cover Regulation. Compliance may also be shown with the help from the relevant design approval holder by referring to the certification documents that were used for obtaining the design approval. Such statements can be sent via e-mail.
In the rare case where the above possibilities are not sufficient, showing compliance by the operator directly to the NAA will be difficult. They will need to involve the design approval holder of the aircraft or the approved change as relevant. This design approval holder should then apply to the Agency for certification that the design complies with the relevant CS-26 or CS-25 paragraph, special condition or equivalent safety case. With that approval the operator can show compliance to the NAA.
Normally, compliance has to be demonstrated to the Agency which will then result in an approval. However, in some cases TC holder statements by e-mail can be accepted if it is within the scope of their DOA to make such statements.

comment *11* comment by: *KLM EASA DOA 21J.012*

CS 26.150(e)(2)	Ref. GM1 26.1 "... compliance with applicable requirements, which shall be assessed by the competent authority". Wording of proposed CS-26 deviates from wording of FAR 25.853(d)(2), Amdt 25-59. To avoid interpretation differences for some older a/c types (e.g. 747-400), please confirm that requirements of FAR25.853(d)(2) at Amdt 25-59 are considered equivalent with proposed CS-26, and can be accepted to show compliance with CS-26.
CS 26.150(f)	Ref. GM1 26.1 "... compliance with applicable requirements,

	which shall be assessed by the competent authority". Wording of proposed CS-26 on ***construction of disposal receptacle*** slightly deviates from wording of FAR25.853(e) at Amdt 25-59 and also from wording of CS 25.853(h). To avoid interpretation differences for some older a/c types (e.g. 747-400), please confirm that requirements of FAR25.853(e) at Amdt 25-59 are considered equivalent with proposed CS-26, and can therefore be accepted to show compliance with CS-26.

response *Noted*

CS 26.150(e)(2): The Agency confirms that FAR 25.853(d)(2) at Amdt 25-59 is considered equivalent with the proposed CS 26.150(e)(2).
CS 26.150(f): The Agency confirms that FAR 25.853(e) at Amdt 25-59 is considered equivalent with the proposed CS 26.150(f).

comment *22* comment by: *Dassault Aviation*

Dassault-Aviation comment on CS 26.150(a)
The first sentence of this paragraph requires to comply with a new standard, unless the airplane was Type Certificated against an earlier standard in which case this earlier standard applies. This means that the new standard is optional and not retroactive. Therefore, it has nothing to do in CS 26. Only the second sentence of CS 26.150 (a) actually contains a retroactive requirement.

response *Accepted*

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 1 - CS 26.155 p. 29

comment *12* comment by: *KLM EASA DOA 21J.012*

CS 26.155 Flammability of cargo compartment liners	**Comment**

CS 26.155(a)(1),(2),(3)	Similar or equivalent requirement with regards to ***ceiling and sidewall liner panels*** do not exist in EASA/FAA TC basis of several older a/c types (e.g. 747-400). It is difficult, if not impossible, for an operator to show compliance, other than via ***TC Holder's statement***. Acceptance of TC Holder's e-mail statement is required to avoid significant economic impact. Please confirm that e-mail compliance statements of TC Holders are acceptable for showing compliance with CS-26.
CS 26.155(b)	The requirement with regards to "***any design features***" is not shown in rule text of CS25.855, JAR25.855 and FAR25.855. CS 25.855 addresses subject requirement only indirectly via Part III of Appendix F (paragraph a(2), which is equivalent with CS 26.155(b)). Identical requirement is found in FAR121.314 only. These items should be treated in the same way, i.e. either incorporate in rule text of CS-25 and (then) in CS-26 **or** in Guidance Material of both Specifications (i.e. CS-25 and CS-26) **or** in Appendix F of CS-25 only. It is difficult, if not impossible, for an operator to show compliance, other than via ***TC Holder's statement***. Please confirm that e-mail compliance statements of TC Holders are acceptable for showing compliance with CS-26.

response *Partially accepted*

The operators will be responsible for showing compliance. In most cases this can be done by referring to the certification basis of the aircraft or the approved changes in which the amendment level of the certification specification will indicate compliance. In any case, the JAR-26 requirements should have been implemented already by EU operators and since the CS-26 text is equivalent to the JAR-26 text, compliance with JAR-26 means also compliance with Part-26. See also Article 5 of the cover Regulation. Compliance may also be shown with the help from the relevant design approval holder by referring to the certification documents that were used for obtaining the design approval. Such statements can be sent via e-mail.
In the rare case where the above possibilities are not sufficient, showing compliance by the operator directly to the NAA will be difficult. They will need to involve the design approval holder of the aircraft or the approved change as relevant. This design approval holder should then apply to the Agency for certification that the design complies with the relevant CS-26 or CS-25

paragraph, special condition or equivalent safety case. With that approval the operator can show compliance to the NAA.
Normally, compliance has to be demonstrated to the Agency which will then result in an approval. However, in some cases TC holder statements by e-mail can be accepted if it is within the scope of their DOA to make such statements.

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 1 - CS 26.200 p. 30

comment *13* comment by: *KLM EASA DOA 21J.012*

JAR 26.200 Landing gear aural warning	Compliance remarks
26.200(a),(b)(2),(3)	Ref. GM1 26.1 "... compliance with applicable requirements, which shall be assessed by the competent authority". Wording of proposed CS-26 deviates from wording of FAR25.729 at Amdt 25-59. To avoid interpretation differences for some older a/c types (e.g. 747-400), please confirm that requirements of FAR25.729 at Amdt 25-59 are considered equivalent with proposed CS-26, and can therefore be accepted to show compliance with CS-26.

response *Noted*

The Agency confirms that FAR 25.729 at Amdt 25-59 is considered equivalent with the proposed CS 26.200(a),(b)(2),(3).

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 1 - Appendix F p. 31

comment *23* comment by: *Dassault Aviation*

Dassault-Aviation comment on CS 26 Appendix F:

	This appendix refers to Appendix F of CS 25 initial issue or later amendment. Does it mean that any amendment can be used to show compliance with CS 26 ? Or does it mean that the latest amendment has to be used? In the later case, it is an unacceptable requirement as it would make any new amendment to CS 25 Appendix F a retroactive requirement. It is not believed that it is the intent of this requirement; therefore it is proposed to refer to CS 25 Appendix F at any Amendment.
response	*Partially accepted* The current text already means that either the initial issue of CS-25 can be used or a later amendment. The later amendment may be used, but is not required.

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 2 - GM1 26.1 p. 33-36

comment	*33* comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)* · In the cross reference list on page 33 there is a reference from JAR 26.3 to Part 26.35. We can not find paragraph 26.35 in the draft of Part 26 in this NPA. Paragraph 26.30 is followed by 26.50 (page 19).
response	*Accepted* The reference was incorrect. It should be to Part 26.30(b)(2).

comment	*35* comment by: *DGAC France* Unlike what is indicated in part VI (Differences introduced in Part-26 and CS-26) or in the cross reference table GM1, the dispositions of JAR-26.3 are not present in Part-26 (Part-26.35 doesn't exist). *JAR 26.3 Equivalent Safety Findings (ESF) (See IEM 26.3) Equivalent Safety Findings included in the Type Certification basis of an aircraft made and accepted by the national Authority remain valid regarding JAR–26 or equivalent requirements.* It seems to be an oversight that should be corrected. If not, the validity of the "Equivalent Safety Findings" included in the Type Certificate would not be true anymore and would cause issues for some aircrafts.
response	*Accepted* The reference was incorrect. It should be to Part 26.30(b)(2).

B. Draft Opinion and Decision - II Draft Decision CS-26 - Book 2 - GM1 26.50(c) p. 36-38

comment	*4* comment by: *Boeing* Page: 36 Paragraph: *SubPart B, GM26.50(c) -- Cabin crew seat location with respect to injury risk* The proposed text states: *"AC 25.785-1A, Section 7 is applicable…"* **REQUESTED CHANGE:** (**strike through indicates delete and underline indicates add)**: *"AC 25.785-~~1A~~ **1B,** Section ~~7~~ **8** is applicable…"* **JUSTIFICATION:** AC 25.785-1A has been cancelled and replaced by AC 25.785-1B. Section 8 of AC 25.785-1B contains the guidance that previously was located in AC 25.785-1A, Section 7. Our suggested revisions correct this information in the NPA.
response	*Accepted*

CRD 2012-13

Resulting text

DRAFT OPINION OF THE EUROPEAN AVIATION SAFETY AGENCY

for a Commission Regulation (EU) No …/… on additional airworthiness requirements for operations

and

for amending Commission Regulation (EU) No 965/2012 laying down requirements and administrative procedures related to Air Operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council

and

DRAFT DECISION OF THE EXECUTIVE DIRECTOR OF THE EUROPEAN AVIATION SAFETY AGENCY

for additional airworthiness specifications for operations (CS-26)

'Additional airworthiness requirements for operations'

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Draft Opinion and Decision

I. Draft Opinion — Part-26

Draft Commission Regulation (EU) No …/…

of […]

on additional airworthiness requirements for operations

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC ([1]), as amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 ([2]), and in particular Article 5 thereof,

Whereas:

(1) Pursuant to Regulation (EC) No 216/2008 (hereinafter referred to as the 'Basic Regulation'), the Commission, assisted by the European Aviation Safety Agency (hereinafter referred to as the 'Agency'), is required to adopt the necessary implementing rules for common airworthiness requirements throughout the Union.

(2) Such requirements, covering the entire life cycle of aeronautical products, may include additional requirements for a given type of operations to be implemented after the initial issuance of an airworthiness approval in the interest of safety.

(3) Already in 1998 the Joint Aviation Authorities (JAA) had issued JAR-26 'Additional (joint) Airworthiness Requirements for Operations'.

(4) The technical requirements of JAR-26 need to be transferred to the EU regulatory framework.

(5) In order to ensure consistency and clarify obligations, a reference to this Regulation is needed in Commission Regulation (EU) No 965/2012 laying down requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.

(6) The Agency prepared draft implementing rules and submitted them as an Opinion to the Commission in accordance with Article 19(1) of Regulation (EC) No 216/2008.

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1 OJ L 79, 19.3.2008, p. 1.

2 OJ L 4, 9.1.2013, p. 34.

(7) The measures provided for in this Regulation are in accordance with the Opinion of the European Aviation Safety Agency Committee established by Article 65 of Regulation (EC) No 216/2008,

HAS ADOPTED THIS REGULATION:

Article 1

Scope

This Regulation lays down common additional airworthiness requirements to support the continued airworthiness and safety improvements of:

1. aircraft registered in a Member State;

2. aircraft registered in a third country and used by an operator for which a Member State ensures oversight.

Article 2

Definitions

For the purposes of this Regulation, the following definitions shall apply:

1. Emergency exits:

   (a) 'Type A emergency exit' means a floor level exit with a rectangular opening of not less than 1.07 m wide by 1.83 m high with corner radii not greater than one sixth of the width of the exit.

   (b) 'Type II emergency exit' means a rectangular opening of not less than 0.51 m wide by 1.12 m high, with corner radii not greater than one third the width of the exit. Type II exits must be floor level exits unless located over the wing, in which case they may not have a step-up inside the aeroplane of more than 0.25 m nor a step-down outside the aeroplane of more than 0.43 m.

2. Cargo compartments:

   (a) 'Class A cargo compartment' means a cargo or baggage compartment in which:

      (i) the presence of a fire would be easily discovered by a crew member while at his/her station; and

      (ii) each part of the compartment is easily accessible in flight.

   (b) 'Class B cargo compartment' means a cargo or baggage compartment in which:

      (i) there is sufficient access in flight to enable a crew member standing at any one access point and without stepping into the compartment to extinguish a fire occurring in any part of the compartment using a hand fire extinguisher;

      (ii) when the access provisions are being used, no hazardous quantity of smoke, flames or extinguishing agent will enter any compartment occupied by the crew or passengers; and

(iii) there is a separate approved smoke detector or fire detector system to give warning to the pilot or flight engineer station.

(c) 'Class C cargo compartment' means a cargo or baggage compartment not meeting the specifications for either a Class A or Class B compartment, but in which:

(i) there is a separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station;

(ii) there is an approved built-in fire extinguishing or suppression system controllable from the cockpit;

(iii) there are means to exclude hazardous quantities of smoke, flames, or extinguishing agent from any compartment occupied by the crew or passengers; and

(iv) there are means to control ventilation and draughts within the compartment so that the extinguishing agent used can control any fire that may start within the compartment.

(d) 'Class D cargo compartment' means a cargo or baggage compartment in which:

(i) a fire occurring in it will be completely confined without endangering the safety of the aeroplane or the occupants;

(ii) there are means to exclude hazardous quantities of smoke, flames, or other noxious gases from any compartment occupied by the crew or passengers;

(iii) ventilation and draughts are controlled within each compartment so that any fire likely to occur in the compartment will not progress beyond safe limits;

(iv) consideration is given to the effect of heat within the compartment on adjacent critical parts of the aeroplane; and

(v) the compartment volume does not exceed 28.32 m^3.

4. 'Maximum operational passenger seating configuration (MOPSC)' means the maximum passenger seating capacity of an individual aircraft, excluding crew seats, established for operational purposes and specified in the operations manual.

5. 'First certificate of airworthiness' means the first certificate of airworthiness issued by any ICAO Member State for the individual aircraft concerned.

6. 'Large aeroplane' means an aeroplane that has the Certification Specifications for large aeroplanes 'CS-25' or equivalent in its certification basis.

Article 3

Additional airworthiness requirements for operations

Aircraft registered in a Member State or registered in a third country and used by an operator for which a Member State ensures oversight shall comply with the provisions of Annex I (Part-26) to this Regulation.

Article 4

Amendment to Commission Regulation (EU) No 965/2012

Annex III (Part-ORO) to Commission Regulation (EU) No 965/2012 laying down requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, is amended in accordance with Annex II to this Regulation.

Article 5

Transition provision

Aircraft for which compliance with JAR-26 has been demonstrated shall be deemed to comply with the initial issue of this Regulation.

Article 6

Entry into force

This Regulation shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, …

For the Commission

The President

ANNEX I

PART-26

ADDITIONAL AIRWORTHINESS REQUIREMENTS FOR OPERATIONS

SUBPART A — GENERAL PROVISIONS

26.10 Competent authority

For the purpose of this Part, the competent authority to which compliance with the requirements needs to be demonstrated by operators shall be the authority designated by the Member State in which the operator has its principal place of business.

26.20 Temporary inoperative equipment

A flight shall not be commenced when any of the aircraft's instruments, items of equipment, or functions required by this Part-26 are inoperative or missing, unless waived by the operator's Minimum Equipment List as defined in Part-ORO.MLR.105 and approved by the competent authority.

26.30 Demonstration of compliance

(a) The Agency shall issue, in accordance with Article 19 of Regulation (EC) No 216/2008, certification specifications as standard means to show compliance of products with this Part. The certification specifications shall be sufficiently detailed and specific to indicate to operators the conditions under which compliance with the requirements of this Part may be demonstrated.

(b) Operators may demonstrate compliance with the requirements of this Part by complying with:

(1) the detailed specifications issued by the Agency under (a) or the equivalent specifications issued by the Agency under 21.A.16A; or

(2) technical standards offering an equivalent level of safety as those included in those specifications.

SUBPART B — LARGE AEROPLANES

26.50 Seats, berths, safety belts, and harnesses

Operators of large aeroplanes used in commercial air transport, type certified on or after 1 January 1958, shall ensure, not later than [one year after the entry into force of this Regulation], that each flight or cabin crew member seat and its restraint system are configured in order to provide an optimum level of protection in an emergency landing whilst allowing the occupant's necessary functions and facilitating rapid egress.

26.100 Location of emergency exits

Except for aeroplanes having an emergency exit configuration installed and approved prior to 1 April 1999, operators of large aeroplanes used in commercial air transport having a maximum operational passenger seating configuration of more than 19 with one or more emergency exits deactivated shall ensure that the distance/distances between the remaining exits remains/remain compatible with effective evacuation.

26.105 Emergency exit access

Operators of large aeroplanes used in commercial air transport shall provide, not later than [one year after the entry into force of this Regulation], means to facilitate the rapid and easy movement of each passenger from their seat to any of the emergency exits in case of an emergency evacuation.

26.110 Emergency exit markings

Operators of large aeroplanes used in commercial air transport shall comply with the following not later than [one year after the entry into force of this Regulation]:

(a) means shall be provided to facilitate the location, access and operation of emergency exits by cabin occupants under foreseeable conditions in the cabin in case of an emergency evacuation;

(b) means shall be provided to facilitate the location and operation of emergency exits by personnel on the outside of the aeroplane in case of an emergency evacuation.

26.120 Interior emergency lighting and emergency light operation

Operators of large aeroplanes used in commercial air transport shall provide, not later than [one year after the entry into force of this Regulation], means to ensure that illuminated exit signage, general cabin and exit area illumination, and low level exit path illumination is available to facilitate the location of exits and movement of passengers to the exits in case of emergency evacuation.

26.150 Compartment interiors

Operators of large aeroplanes used in commercial air transport shall comply with the following not later than [one year after the entry into force of this Regulation]:

(a) all materials and equipment used in compartments occupied by the crew or passengers shall demonstrate flammability characteristics compatible with minimising the effects of in-flight fires and the maintenance of survivable conditions in the cabin for a time commensurate with that needed to evacuate the aircraft;

(b) if smoking is prohibited, this shall be indicated with placards;

(c) if smoking is allowed, ashtrays in appropriate numbers, locations and with suitable markings shall be provided, and illuminated signs, operable by the flight crew, shall be provided to indicate when smoking is prohibited;

(d) disposal receptacles shall be such that containment of an internal fire is ensured; such receptacles shall be marked to prohibit the disposal of smoking materials.

26.155 Flammability of cargo compartment liners

Operators of large aeroplanes used in commercial air transport, type certified after 1 January 1958, shall ensure, not later than [one year after entry into force of this Regulation], that the liners of Class C or Class D cargo compartments are constructed of materials that adequately prevent the effects of a fire in the compartment from endangering the aircraft or its occupants.

26.160 Lavatory fire protection

Operators of large aeroplanes used in commercial air transport with a maximum operational passenger seating configuration of more than 19 shall comply with the following not later than [one year after the entry into force of this Regulation]:

Lavatories shall be equipped with:

(a) smoke detection means;

(b) means to automatically extinguish a fire occurring in each disposal receptacle.

26.200 Landing gear aural warning

Operators of large aeroplanes used in commercial air transport shall ensure, not later than [one year after the entry into force of this Regulation], that an appropriate landing gear aural warning device is installed in order to significantly reduce the likelihood of landings with landing gear inadvertently retracted.

26.250 Flight crew compartment door operating systems — single incapacitation

Operators of large aeroplanes used in commercial air transport shall ensure, not later than [one year after the entry into force of this Regulation], that flight crew compartment door operating systems, where installed, be provided with alternate opening means in order to facilitate access by cabin crew members into the flight crew compartment in the case of a single flight crew member incapacitation.

ANNEX II

Amendment to PART-ORO.AOC

In 'Subpart A — General provisions', paragraph ORO.AOC.100 is amended as follows:

'ORO.AOC.100 Application for an air operator certificate

…

(c) Applicants shall demonstrate to the competent authority that:

(1) they comply with all the applicable requirements of: ~~Annex IV to Regulation (EC) No 216/2008, this Annex and Annex IV (Part-CAT) and Annex V (Part-SPA) to this Regulation, as applicable;~~

(i) Annex IV to Regulation (EC) No 216/2008;

(ii) this Annex (Part-ORO);

(iii) Annex IV (Part-CAT) and Annex V (Part-SPA) to this Regulation, as applicable; and

(iv) Regulation (EU) No …/… (Part-26);

(2) all aircraft operated have a certificate of airworthiness (CoA) in accordance with Regulation (EU) No ~~1702/2003~~ 748/2012; and

(3) its organisation and management are suitable and properly matched to the scale and scope of the operation.'

II. Draft Decision — CS-26

Draft CS-26

ADDITIONAL AIRWORTHINESS SPECIFICATIONS FOR OPERATIONS

Book 1

SUBPART A — GENERAL PROVISIONS

CS 26.1 Purpose and scope

This CS is the standard means to show compliance of products with the requirements of Part-26. (See GM1 26.1)

SUBPART B — LARGE AEROPLANES

CS 26.50 Seats, berths, safety belts, and harnesses

Compliance with Part 26.50 is demonstrated by complying with CS 25.785(g), (h), (j) and (k), or equivalent, or with the following:

(a) Each seat at a flight deck station is equipped with a combined safety belt and shoulder harness with a single-point release that permits the flight deck occupant, when seated with safety belt and shoulder harness fastened, to perform all of the occupant's necessary flight deck functions. There must be a means to secure each combined safety belt and shoulder harness, when not in use, to prevent interference with the operation of the aeroplane and with rapid egress in an emergency. Shoulder harness and combined safety belt and shoulder harness that were approved and installed prior to 6 March 1980 may continue to be used. Safety belt and shoulder harness restraint systems may be designed to the inertia load factors established under the certification basis of the aeroplane.

(b) Each seat for a cabin crew member required by Part-ORO.CC.100, located in passenger compartments,

(1) is equipped with a restraint system consisting of a combined safety belt and shoulder harness unit with a single-point release. Each combined safety belt and shoulder harness is equipped with a means to secure it, when not in use, to prevent interference with rapid egress in an emergency;

(2) to the extent possible, without compromising its proximity to required floor level emergency exits, is located to provide a direct view of the cabin area for which the cabin crew member is individually responsible, except that for aeroplanes with a certification basis prior to JAR 25.785 at Change 8 (or FAR Part 25, §25.785, at Amendment 25-51 respectively), cabin crew member seats need not be relocated to meet that condition if an indirect view into the passenger cabin is given by a mirror.

(3) is:

(i) either forward or rearward facing, with an energy absorbing rest that is designed to support the arms, shoulders, head, and spine; and

(ii) positioned so that when not in use does not interfere with the use of passageways and exits.

Combined safety belt and shoulder harness that were approved and installed prior to 6 March 1980 may continue to be used. Safety belt and shoulder harness restraint systems may be designed to the inertia load factors established under the certification basis of the aeroplane.

(c) Each seat for a cabin crew member required by Part-ORO.CC.100, is located to minimise the probability of its occupant suffering injury by being struck by items dislodged in a galley, or from a stowage compartment or serving cart. All items expected in these locations in service are considered. (See GM1 26.50(c))

(d) Each occupant of a seat that makes more than an 18-degree angle with the vertical plane containing the aeroplane centre line is protected from head injury by a safety belt and an energy absorbing rest that will support the arms, shoulders, head, and spine, or by a safety belt and shoulder harness that prevents the head from contacting any injurious object. Each occupant of any other seat is protected from head injury by a safety belt and, as appropriate to the type, location, and angle of facing of each seat, by one or more of the following:

(1) a shoulder harness that will prevent the head from contacting any injurious object;

(2) the elimination of any injurious object within striking radius of the head;

(3) an energy absorbing rest that will support the arms, shoulders, head, and spine.

CS 26.100 Location of emergency exits

Compliance with Part 26.100 is demonstrated by complying with the following:

If one or more emergency exits ~~is~~ are deactivated, the distance(s) between the remaining exits is (are) ~~at least~~ no more than 18.3 m (60 feet) from any adjacent passenger emergency exit on the same side of the same deck of the fuselage, as measured parallel to the aeroplane's longitudinal axis between the nearest exit edges.

CS 26.105 Emergency exit access

Compliance with Part 26.105 is demonstrated by complying with CS 25.813(d) to (f) or equivalent, or with the following:

(a) Reserved.

(b) If it is necessary to pass through a passageway between passenger compartments to reach any required emergency exit from any seat in the passenger cabin, the passageway is unobstructed. However, curtains may be used if they allow free entry through the passageway.

(c) No door is installed in any partition between passenger compartments.

(d) If it is necessary to pass through a doorway separating the passenger cabin from other areas to reach any required emergency exit from any passenger seat, the door has a means to latch it in the open position. The latching means withstands the loads imposed upon it when the door is subjected to the ultimate inertia forces, relative to the surrounding structure, prescribed in CS 25.561(b), or equivalent, at the amendment level specified in the relevant Type Certificate Data Sheet, or equivalent document.

CS 26.110 Emergency exit markings

Compliance with Part 26.110 is demonstrated by complying with CS 25.811(a) to (d), and (f) & (g), or equivalent, and CS 25.811(e) or equivalent, or with the following:

(a) Each passenger emergency exit, its means of access, and its means of opening ~~is~~ are conspicuously marked.

(b) The identity and location of each passenger emergency exit is recognisable from a distance equal to the width of the cabin.

(c) Means are provided to assist the occupants in locating the exits in conditions of dense smoke.

(d) The location of each passenger emergency exit is indicated by a sign visible to occupants approaching along the main passenger aisle (or aisles). There is:

(1) a passenger emergency exit locator sign above the aisle (or aisles) near each passenger emergency exit, or at another overhead location if it is more practical because of low headroom, except that one sign may serve more than one exit if each exit can be seen readily from the sign;

(2) a passenger emergency exit marking sign next to each passenger emergency exit, except that one sign may serve two such exits if they can both be seen readily from the sign; and

(3) a sign on each bulkhead or divider that prevents fore and aft vision along the passenger cabin to indicate emergency exits beyond and obscured by the bulkhead or divider, except that if this is not possible, the sign may be placed at another appropriate location.

Each sign listed in this subparagraph may use the word 'exit' in its legend in place of the term 'emergency exit' or a universal symbolic exit sign. The design of the exit signs is chosen to provide a consistent set throughout the cabin. (See GM1 26.110(d))

(e) The location of the operating handle and instructions for opening exits from the inside of the aeroplane are clearly shown in the following manner:

(1) each passenger emergency exit has, on or near the exit, a marking that is readable from a distance of 76 cm (30 inches);

(2) each passenger emergency exit operating handle and the cover removal instructions, if the handle is covered, are:

(i) self-illuminated with an initial brightness of at least 0.51 candela/m^2 (160 microlamberts) ~~(with the illumination level not decreasing in service to below 100 microlamberts)~~; or

(ii) conspicuously located and well illuminated by the emergency lighting even in conditions of occupant crowding at the exit.

(3) Reserved.

(4) All Type II and larger passenger emergency exits with a locking mechanism released by motion of a handle are marked by a red arrow with a shaft at least 19 mm (0·75 inch) wide, adjacent to the handle, that indicates the full extent and direction of the unlocking motion required. The word OPEN is horizontally situated adjacent to the arrow head and is in red capital letters at least 25 mm (1 inch) high. The arrow and word OPEN are located on a background which provides adequate contrast. (See GM1 26.110(e)(4))

(f) Each emergency exit that is openable from the outside, and its means of opening is marked on the outside of the aeroplane. In addition, the following apply:

(1) The outside marking for each passenger emergency exit in the side of the fuselage includes one 5 cm (2 inch) coloured band outlining the exit.

(2) Each outside marking, including the band, has colour contrast to be readily distinguishable from the surrounding fuselage surface. The contrast is such that if the reflectance of the darker colour is 15 % or less, the reflectance of the lighter colour is at least 45 %. 'Reflectance' is the ratio of the luminous flux reflected by a body to the luminous flux it receives. When the reflectance of the darker colour is greater than 15 %, at least a 30 % difference between its reflectance and the reflectance of the lighter colour is provided.

(3) In the case of exits other than those in the side of the fuselage, such as ventral or tail cone exits, the external means of opening, including instructions if applicable, are conspicuously marked in red, or bright chrome yellow if the background colour is such that red is inconspicuous.

When the opening is located on only one side of the fuselage, a conspicuous marking to that effect is provided on the other side.

CS 26.120 Interior emergency lighting and emergency light operation

Compliance with Part 26.120 is demonstrated by complying with CS 25.812(b), (c), (d) and (h) or equivalent and CS 25.812(a) and (e) or equivalent, or with the following:

(a) An emergency lighting system, independent of the main lighting system, is installed. However, sources of general cabin illumination may be common to both the emergency and the main lighting system if the power supply to the emergency lighting system is independent of the power supply to the main lighting system. The emergency lighting system includes:

(1) illuminated emergency exit marking and locating signs, sources of general cabin illumination and interior lighting in emergency exit areas;

(2) for aeroplanes that have a maximum approved passenger seating configuration of more than 19, a floor proximity emergency escape path marking that provides emergency evacuation guidance for passengers when all sources of illumination more than 1.22 m (4 feet) above the cabin aisle floor are totally obscured. In the dark of the night, the floor proximity emergency escape path marking enables each passenger to:

(i) after leaving the passenger seat, visually identify the emergency escape path along the cabin aisle floor to the first exits or pair of exits forward and aft of the seat;

(ii) readily identify each exit from the emergency escape path by reference only to markings and visual features not more than 1.22 m (4 feet) above the cabin floor.

(b) Except for lights forming part of the emergency lighting subsystems provided in compliance with Part CAT.IDE.A.275(b)(4) and (5) that serve no more than one assist means, are independent of the aeroplane's main emergency lighting systems, and are automatically activated when the assist means is deployed, each light required for interior and exterior emergency lighting:

(1) is operable manually both from the flight crew station and for aeroplanes on which a cabin crew member is required, from a point in the passenger compartment that is readily accessible from a normal cabin crew seat;

(2) has a means to prevent inadvertent operation of the manual controls;

(3) when armed or turned on at either station, remains lighted or becomes lighted upon interruption of the aeroplane's normal electric power;

(4) provides the required level of illumination for at least 10 minutes at the critical ambient conditions after emergency landing;

(5) has a cockpit control device that has an 'on', 'off', and 'armed' position.

(c) In addition to subparagraphs (a) and (b) above, for an aeroplane which had its initial Certificate of Airworthiness issued prior to 1 December 2006, the following conditions are met:

(1) For an aeroplane for which the application for the type certificate was filed prior to 1 May 1972:

(i) each passenger emergency exit marking and each locating sign has white letters at least 25 mm (1 inch) high on a red background at least 5 cm (2 inches) high. These signs may be internally electrically illuminated, or self-illuminated by other than electrical means, with an initial brightness of at least 0.51 cd/m^2 (160 microlamberts). The colours may be reversed in the case of internally electrically illuminated signs if this will increase the illumination of the exit;

(ii) the sources of general cabin illumination provides enough general lighting in the passenger cabin so that the average illumination when measured at 102 cm (40-inch) intervals at seat armrest height, on the centre line of the main passenger aisle, is at least 0.54 lux (0.05 foot-candle);

(iii) the floor of the passageway leading to each floor level passenger emergency exit, between the main aisles and the exit openings, is provided with illumination.

(2) For an aeroplane for which the application for the type certificate was filed on or after 1 May 1972, the interior emergency lighting specifications under which the aeroplane was type certified..

(d) In addition to subparagraphs (a) and (b) above, for an aeroplane which had its initial Certificate of Airworthiness issued on or after 1 December 2006, and for which the application for the type certificate was filed prior to 1 May 1972, the following conditions are met:

(1) For an aeroplane that has a passenger seating configuration, excluding pilot seats, of:

(i) 10 seats or more, each passenger emergency exit locator sign and marking sign required by Part 26.110(d) has red letters at least 38 mm (1 ½ inches) high on an illuminated white background, and has an area of at least 135 cm^2 (21 square inches) excluding the letters. The lighted background-to-letter contrast is at least 10:1. The letter height to stroke-width ratio are not more than 7:1 nor less than 6:1. These signs are internally electrically illuminated with a background brightness of at least 86 cd/m^2 (25 foot-lamberts) and a high-to-low background contrast not greater than 3:1. Other passenger emergency exit signs required by Part 26.110(d) have red letters at least 38 mm (1 ½ inches) high on a white background having an area of at least 135 cm^2 (21 square inches) excluding the letters. These signs are internally electrically illuminated or self-illuminated by other than electrical means and have an initial brightness of at least 1.27

cd/m^2 (400 microlamberts). The colours are reversed in the case of a sign that is self-illuminated by other than electrical means.

(ii) 9 seats or less, passenger emergency exit signs that are required by Part 26.110(d), have red letters at least 25 mm (1 inch) high on a white background at least 5 cm (2 inches) high. These signs may be internally electrically illuminated or self-illuminated by other than electrical means, with an initial brightness of at least 0.51 cd/m^2 (160 microlamberts). The colours may be reversed in the case of a sign that is self-illuminated by other than electrical means.

(2) General illumination in the passenger cabin is provided so that when measured along the centre line of the main passenger aisle(s), and cross aisle(s) between main aisles, at seat armrest height and at 102 cm (40-inch) intervals, the average illumination is not less than 0.54 lux (0.05 foot-candle) and the illumination at each 102 cm (40-inch) interval is not less than 0.11 lux (0.01 foot-candle). A main passenger aisle is considered to extend along the fuselage from the most forward passenger emergency exit or cabin occupant seat, whichever is further forward, to the most rearward passenger emergency exit or cabin occupant seat, whichever is further aft.

(3) The floor of the passageway leading to each floor-level passenger emergency exit, between the main aisles and exit openings, is provided with illumination that is not less than 0.22 lux (0.02 foot-candle) measured along a line that is within 15 cm (6 inches) of and parallel to the floor and is centred on the passenger evacuation path.

(e) Each sign required by Part 26.120 may use a universal symbolic exit sign. The design of the signs is chosen to provide a consistent set throughout the cabin. (See GM1 26.110(d))

CS 26.150 Compartment interiors

Compliance with Part 26.150 is demonstrated by complying with CS 25.853 and Appendix F or equivalent, CS 25.853(e) or equivalent, and CS 25.791 or equivalent, or with the following:

For each compartment occupied by the crew or passengers the following apply:

(a) Upon any major replacement of any individual group of components as specified in Appendix F, Part I, subparagraph (a)(1)(i), such as interior ceiling panels, wall panels, etc., this individual group of components complies with Appendix F, Part I of this CS 26. (See GM1 26.150(a))

(b) Seat cushions, except those on flight crew member seats, on large aeroplanes, type certified after 1 January 1958, comply with the fire protection specifications of Appendix F, Part II.

(c) (1) Heat release (other than for lavatory interiors or flight deck), for interior ceiling and wall panels (other than lighting lenses), partitions, and the outer surfaces of galleys, large cabinets and stowage compartments (other than underseat stowage compartments and compartments for stowing

small items, such as magazines and maps), in large aeroplanes which had their initial Certificate of Airworthiness issued on or after 20 August 1988, but prior to 20 August 1990, and having an MOPSC of more than 19, comply with the heat release rate testing provisions of Appendix F, Part IV, except that the total heat release over the first two minutes of sample exposure does not exceed 100 kilowatt-minutes per square metre, and the peak heat release rate does not exceed 100 kilowatts per square metre.

(2) Heat release and smoke density (other than for lavatory interiors or flight deck) for interior ceiling and wall panels (other than lighting lenses), partitions, and the outer surfaces of galleys, large cabinets and stowage compartments (other than underseat stowage compartments and compartments for stowing small items, such as magazines and maps), in large aeroplanes, having an MOPSC of more than 19, which had their initial Certificate of Airworthiness issued on or after 20 August 1990, comply with the heat release and smoke density specifications of Appendix F, Parts IV & V. (See GM1 26.150(c))

(d) Large aeroplanes having an MOPSC of more than 19, type certified after 1 January 1958 upon the first substantially complete replacement of the cabin interior components (i.e. interior ceiling and wall panels (other than lighting lenses), partitions, and the outer surfaces of galleys, large cabinets and stowage compartments (other than underseat stowage compartments and compartments for stowing small items, such as magazines and maps)), comply with the heat release and smoke density specifications of Appendix F, Parts IV & V. (See GM1 26.150(d))

(e) If smoking is to be prohibited, there is a placard so stating, and if smoking is allowed, comply with the following:

(1) there is an adequate number of self-contained, removable ashtrays; and

(2) where the crew compartment is separated from the passenger compartment, there is at least one sign (using either letters or symbols) notifying when smoking is prohibited. When illuminated, it is legible to each person seated in the passenger cabin under all probable conditions of cabin illumination, notifying all passengers when smoking is prohibited. Signs which notify when smoking is prohibited are installed so as to be operable from either pilot's seat.

(f) Each disposal receptacle for towels, paper or waste is fully enclosed and constructed of materials adequate in resistance to fire such that any fire likely to occur in it under normal use is contained. The ability of the disposal receptacle to contain those fires under all probable conditions of wear, misalignment, and ventilation expected in service is demonstrated by test unless appropriate maintenance tasks are put in place to ensure that excess wear or misalignment are quickly repaired. A placard containing the legible words or symbology indicating 'No cigarette disposal' is located on or near each disposal receptacle door.

CS 26.155 Flammability of cargo compartment liners

Compliance with Part 26.155 is demonstrated by complying with CS 25.855 and Appendix F, Part III, or equivalent, or with the following:

(a) Large aeroplanes, type certified after 1 January 1958, with Class C or Class D compartment, greater than 5.66 m^3 (200 cubic feet) have ceiling and sidewall liner panels which are constructed of:

(1) glass fibre reinforced resin; or

(2) materials which meet the flame penetration test specifications of Appendix F, Part III, or other equivalent methods; or

(3) aluminium (only in the case of aluminium liner installations approved prior to 1 July 1989).

(b) For compliance with this paragraph, the term 'liner' includes any design features, such as a joint or fastener, which would affect the capability of the liner to safely contain a fire.

CS 26.160 Lavatory fire protection

Compliance with Part 26.160 is demonstrated by complying with CS 25.854, or equivalent, or with the following:

(a) each lavatory is equipped with a smoke detector system or equivalent that provides a warning light in the cockpit, or provides a warning light or audible warning in the passenger cabin that would be readily detected by a cabin crew member; and

(b) each lavatory is equipped with a built-in fire extinguisher for each disposal receptacle for towels, paper, or waste, located within the lavatory. The extinguisher is designed to discharge automatically into each disposal receptacle upon occurrence of a fire in that receptacle.

CS 26.200 Landing gear aural warning

Compliance with Part 26.200 is demonstrated by complying with CS 25.729, or equivalent, or with the following:

(a) Large aeroplanes have a landing gear aural warning device that functions continuously under the following conditions:

(1) for aeroplanes with an established approach flap position, whenever the flaps are extended beyond the maximum certified approach climb configuration position in the aeroplane flight manual and the landing gear is not fully extended and locked;

(2) for aeroplanes without an established approach climb flap position, whenever the flaps are extended beyond the position at which landing gear extension is normally performed and the landing gear is not fully extended and locked.

(b) The warning system of subparagraph (a) of this paragraph:

(1) does not have a manual shut-off means readily available to the flight crew such that it could be operated instinctively, inadvertently or by habitual reflexive action;

(2) is, in addition to the throttle-actuated device, installed under the airworthiness type certification specifications; and

(3) may utilise any part of the throttle-actuated system, including the aural warning device.

(c) The flap position sensing unit may be installed at any suitable place in the aeroplane.

Appendix F

Part I — Test criteria and procedures

Refer to CS-25 Appendix F, Part I, initial issue or later amendments.

Part II — Flammability of seat cushions

Refer to CS-25 Appendix F, Part II, initial issue or later amendments.

Part III — Test method to determine flame penetration resistance of cargo compartment liners

Refer to CS-25 Appendix F, Part III, initial issue or later amendments.

Part IV — Test method to determine the heat release rate from cabin materials exposed to radiant heat

Refer to CS-25 Appendix F, Part IV, initial issue or later amendments.

Part V — Test method to determine the smoke emission characteristics of cabin materials

Refer to CS-25 Appendix F, Part V, initial issue or later amendments.

BOOK 2 – GUIDANCE MATERIAL (GM)

1. GENERAL

1.1. This Book 2 contains Guidance Material.

2. PRESENTATION

2.1. A numbering system has been used in which the Guidance Material uses the same number as the paragraph in Book 1 to which it refers. The number is introduced by the letters GM to distinguish the material from Book 1.

SUBPART A — GENERAL

GM1 26.1 JAR-26 / JAR/CS-25 / FAR-25+121 / OPS / Part-26 / CS-26 / GM-26 Cross reference table

This table is intended to be a quick cross reference table between those provisions contained on the one hand in Part-26, CS-26 and GM-26, and on the other hand their 'parent' airworthiness code, JAR-26, FAA's requirements FAR-25 and/or FAR Part-121, as well as related EU-OPS and new EASA operational requirements. This table is only indicative and does not pre-empt compliance with applicable requirements, which shall be assessed by the competent authority.

JAR-26	JAR-25 / CS-25	FAR-25/ Part-121	OPS	Part-26	CS-26	GM-26
JAR-26.1	n/a	n/a	n/a	n/a	n/a	n/a
JAR-26.2	n/a	n/a	n/a	n/a	n/a	n/a
JAR-26.3	n/a	n/a	n/a	26.30(b)(2)	n/a	n/a
JAR-26.5	n/a	n/a	n/a	n/a	n/a	n/a
JAR-26.50	JAR-25.785(h), (j) & (k) at Change 8, 30/11/81 CS-25.785(g)	FAR-25.785(g), Amdt 25-51, 06/03/80 FAR-121.311 (d), (f) & (g) at Change 21, 17/02/98	OPS-1.730 CAT.IDE.A.205	Part-26.50	CS-26.50	GM1 26.50(c)
JAR-26.100	JAR-25.807(d)(7) at Change 13 and Amdt 93/1, 08/03/93 CS 25.807	121.310(m)	n/a	Part-26.100	CS-26.100	n/a
JAR-26.105	JAR-25.813(d) to (f) at Change 8, 30/11/81 CS 25.813	121.310(f)	OPS-1.735 CAT.IDE.A.215	Part-26.105	CS-26.105	n/a
JAR-26.110	JAR-25.811(a) to (d) and (f) to (g) at Change 8, 30/11/81 JAR-25.811(e) at Change 14, 27/05/94 CS 25.811	121.310(b)	OPS-1.815 CAT.IDE.A.275	Part-26.110	CS-26.110	GM1 26.110 (e)(4)
JAR-26.120	JAR-25.812(b), (c), (d) & (h) at Change 8, 30/11/81	FAR-121.310(b), (c) & (d) at Change 21,	OPS-1.815(a)(1) CAT.IDE.A.275(b)	Part-26.120	CS-26.120	n/a

JAR-26	JAR-25 / CS-25	FAR-25/ Part-121	OPS	Part-26	CS-26	GM-26
	JAR-25.812(a) & (e) at Change 12, 16/06/86 CS-25.812	17/02/98				
JAR-26.125	JAR-25.812(f) & (g) at Change 8, 30/11/81 CS-25.812	FAR-121.310(h)(1) at Change 21, 17/02/98	OPS-1.185(a)(1)(iv) and (v) CAT.IDE.A.275 (b)(4) and (5)	n/a	n/a	n/a
JAR-26.130	CS-25.810	FAR-25.2(a) at Amdt 25-72, 20/08/90 FAR-121.310 (a) & (h)(2) at Change 21, 17/02/98	OPS-1.805 CAT.IDE.A.265	n/a	n/a	n/a
JAR-26.150	JAR-25.791 at Change 8, 20/11/81 JAR-25.853(a) to (d) at Change 14, 27/05/94 JAR-25.853(e) at Change 13 plus Amdt 91/1, 12/04/91 JAR-25.853(f) and Appendix F at Change 14, 27/05/94 Appendix F, Part I, at Amdt 93/1, 08/03/93 Appendix F, Part II, III, IV, V at Change 13, 05/10/89 CS-25.853	FAR-121.312	OPS-1.731 CAT.IDE.A.210	Part-26.150	CS-26.150 App. F	GM1 26.150 (a), GM1 26.150 (c), GM1 26.150 (d)
JAR-26.155	JAR-25.855 and Appendix F, Part III at Change 13 plus Amdt 93/1, 08/03/93 CS-25.855	121.314	n/a	Part-26.155	CS-26.155 App. F	n/a
JAR-26.160	JAR-25.854 at Change 13 at Amdt 93/1, 08/03/93	121.308	n/a	Part-26.160	CS-26.160	n/a

JAR-26	JAR-25 / CS-25	FAR-25/ Part-121	OPS	Part-26	CS-26	GM-26
	CS-25.854					
JAR-26.200	JAR-25.729 at Amdt 93/1, 08/03/93 CS-25.729	121.289, Amdt 121-227	n/a	Part-26.200	CS-26.200	n/a
JAR-26.250	n/a	121.313(j)(1)(ii)	n/a	Part-26.250	n/a	n/a
JAR-26.260	CS-25.795	121.313(j)(1)(ii)	OPS-1.1255 ORO.SEC.100.A	n/a	n/a	n/a

GM1 26.30 Demonstration of compliance

For the initial issue of Part-26 requirements, which is a transposition of existing JAR-26 requirements, the operators will be responsible for showing compliance. In most cases this can be done by referring to the certification basis of the aircraft or the approved changes in which the amendment level of the certification specification will indicate compliance. In any case, the JAR-26 requirements should have been implemented already by EU operators and since the CS-26 text is equivalent to the JAR-26 text, compliance with JAR-26 means also compliance with Part-26. See also Article 5 of the cover Regulation of Part-26. In the rare case where the above possibilities are not sufficient, showing compliance by the operator directly to the NAA will be difficult. They will need to involve the design approval holder of the aircraft or the approved change as relevant. This design approval holder should then apply to the Agency for certification that the design complies with the relevant CS-26 or CS-25 paragraph, special condition or equivalent safety case. With that approval information the operator can show compliance to the NAA.

SUBPART B — LARGE AEROPLANES

GM1 26.50(c) Cabin crew seat location with respect to injury risk

AC 25.785-1B, Section 8, is applicable when showing compliance with CS 26.50(c).

GM1 26.110(d) Universal symbolic exit signs

Guidance on the use of universal symbolic exit signs can be found in AMC 25.812(b)(1).

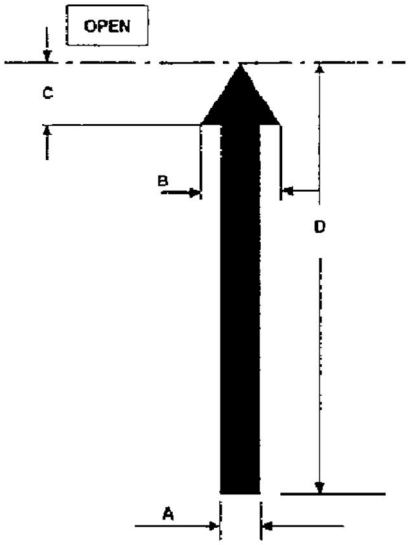
GM1 26.110(e)(4) Emergency exit markings

The indicating markings for all Type II and larger passenger emergency exit unlocking handle motions should conform to the general shapes and dimensions indicated by Figures 1 and 2.

NOTE: As far as it is practicable, the markings should be located to avoid obscuring viewing windows located on or alongside the exits, or coincidence with any other required marking or safety feature.

EXAMPLE MARKING FOR INDICATION OF LINEAR OPENING MOTION

Where practical and unambiguous arrow point and base of arrow shaft to be within ± 25 mm (1 inch) of fully unlocked and fully locked positions respectively.



DIMENSIONS

A = 19 mm (0·75") minimum

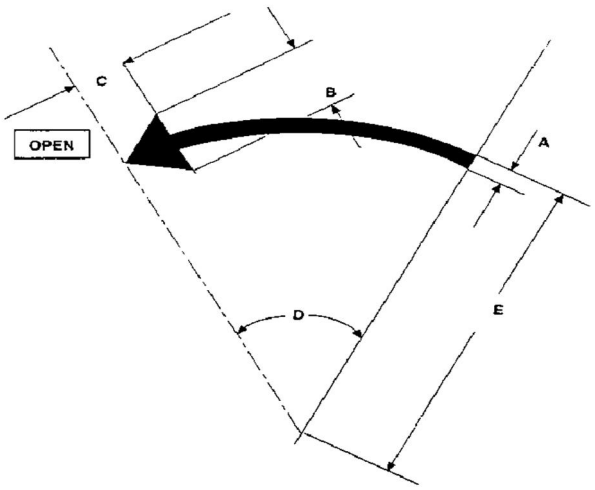
B = 2 × A

C = B (recommended)

D = Indicative of the full extent of handle travel (each installation to be individually assessed)

FIGURE 1

EXAMPLE MARKING FOR INDICATION OF ROTARY OPENING MOTION



Arrow point and base of arrow shaft to be within ± 25 mm (1 inch) of fully unlocked and fully locked positions respectively.

DIMENSIONS

A = 19 mm (0·75") minimum

B = 2 × A

C = B (recommended)

D = Full extent of handle centre line travel

E = Three quarters of handle length (where practicable)

FIGURE 2

GM1 26.150(a) Compartment interiors

'Major replacement': More than 50 % of any component types affected in the cabin are replaced. For example, 51 % of the sidewall panels, or 51 % of the ceiling panels.

GM1 26.150(c) Compartment interiors

Galley carts and containers are considered as 'open galley surfaces' and therefore are subject to the same requirements as galleys in this respect, namely CS 26.150(c). However, because of the rotatable nature of these components, and their limited lifespan, it is permissible to use galley carts and containers manufactured prior to 20/08/1990.

GM1 26.150(d) Compartment interiors

'Complete replacement': All of the affected components in the cabin are replaced (it is not relevant whether the other components that are not affected are replaced).

(a) The qualifying word 'substantially' may be used to prevent operators from avoiding compliance by not replacing a minor, inconsequential cabin component and stating that there had not been a 'complete replacement'.

(b) The definition does, therefore, permit individual replacement of cabin interior components without the mandatory replacement of all components at the same time. It should also be noted that removing components for refinishing and reinstalling them in the same aeroplane, or in a different aeroplane not subject to more stringent requirements, is considered 'refurbishment' and not 'replacement'.