COMMENT RESPONSE DOCUMENT (CRD) TO NOTICE OF PROPOSED AMENDMENT (NPA) 2011-10

on

'Certification Specifications – Cabin Crew Data'

Reactions to this CRD should be submitted via the CRT by clicking the 'add a general reaction' button. Please indicate clearly the applicable paragraph.

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Executive Summary

The CRD 2011-10 contains all comments received to the NPA 2011-10, the responses of the Agency to these comments and the resulting text of the draft Decision for Certification Specifications for Cabin Crew Data. The Certification Specifications for Cabin Crew Data comprises information related to the type specific elements for cabin crew, as required under the OSD concept.

The Certification Specifications include the proposal of the following:

a) A uniform process and criteria for determination of a new type and a variant for cabin crew operation. The determination process is based on the comparison of candidate and base aircraft and identification of differences in type specific elements related to aircraft configuration, doors and exits, aircraft systems and normal and emergency operations.

b) Provision of aircraft type specific data to be used for development of training programmes for cabin crew, for establishing procedures and/or as reference information for cabin crew about the aircraft type they are to be qualified on. The data provision of which is required from the applicant relates to aircraft description, flight crew compartment, cabin compartment and aircraft systems including associated equipment. The data provided at request of the applicant represents supplementary data the applicant may elect to provide to support the development of the relevant training programmes.

A. Explanatory Note

I. General

1. The purpose of the Notice of Proposed Amendment (NPA) 2011-10, dated 6 June 2011, was to develop the draft Decision of the Executive Director of the European Aviation Safety Agency on Certification Specifications (CS) and Guidance Material (GM) related to Operational Suitability Data - Cabin Crew Data that will be required by an Amendment of Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations. The scope of this rulemaking activity is outlined in the Terms of Reference (ToR) 21.039.

II. Consultation

2. NPA 2011-10 containing the draft Executive Director Decision was published on the website (http://www.easa.europa.eu) on 6 June 2011.
3. The public consultation period was extended in accordance with Article 6(6) of the Rulemaking Procedure[1], at the request of stakeholders, to ensure sufficient time for analysing and commenting on the NPA.
4. By the closing date of 30 September 2011, the European Aviation Safety Agency (hereafter referred to as the 'Agency') had received 76 comments from 18 National Aviation Authorities, professional organisations and private companies.

III. Publication of the CRD

5. All comments received have been acknowledged and incorporated into this Comment-Response Document (CRD) with the responses of the Agency.
6. In responding to comments, a standard terminology has been applied to attest the Agency's acceptance of the comment. This 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.
7. The resulting text highlights the changes as compared to the NPA.
8. The Executive Director Decision on Certification Specifications Cabin Crew Data and the associated Guidance Material 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.
9. Such reactions should be received by the Agency not later than **10 September 2012** and should be submitted using the Comment-Response Tool at http://hub.easa.europa.eu/crt.

[1] Management Board Decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure), EASA MB 01-2012, 13.3.2012.

IV. Comment-Response Summary

10. CS-CC vs. CS-CCD and rule numbering convention

The NPA title Certification Specifications Cabin Crew CS-CC was modified and reads now as *Certification Specifications Cabin Crew Data (CS-CCD).* The modification was made to prevent possible confusions and to clearly distinguish the airworthiness-related rule CS-CCD from OPS regulatory requirements concerning cabin crew: Commission Regulation (EU) No 290/2012 and operational requirements included in Opinion 04/2011 Air Operations, both of which use the acronym 'CC' in the titles of their paragraphs.

The numbering convention of CS-CCD was modified to be consistent with EASA Airworthiness regulatory requirements.

11. The Agency established a comment review group (hereafter referred to as the 'group') consisting of the members of the NPA 2011-10 drafting group; two additional experts who had contributed to the consultation were invited to the review. Three group meetings took place between 2011 and 2012. The group carefully considered the comments received and held extensive discussions on the main identified issues.

12. Determination of a new type

CS CCD.210(b)

Some operators expressed concern that the proposed wording of the paragraph CS CCD.210(b) which read *'…the candidate aircraft is determined a new type if one or more of the type specific elements of CS-CC-205(b)(1) and (b)(2) are neither identical nor similar to the base aircraft.'* would lead to an increased number of aircraft determined as a new type.

The comment was taken into account and extensively discussed by the group. The criteria resulting in determination of a candidate aircraft as a new type by the applicant (manufacturer or design organisation) have been carefully considered. The paragraph CS CCD.210 has been modified to limit the criteria that would lead to determination of a candidate aircraft as a new type.

Definition of 'similar'

Taking into account the comment received on the interpretation of 'similar' being vague without providing a definition, the approach of *determining similarity* of determination elements has been replaced with *identifying differences* of determination elements. This was based on the fact that it was practically impossible to develop a definition of similarity for the purpose of CS-CCD.

Number of determination elements

Some commentators stated that the four determination elements which are to be assessed by the applicant are beyond the EU-OPS 1.1030 and they suggested aligning the determination elements with the operational requirements.

The determination elements referenced in the NPA have been historically used in the JOEB/EASA OEB CC process and address the type specific determination of an aircraft at the level of the applicant and the Agency. Moreover, the decision of the Agency that the determination process is based on four determination elements was presented to the rulemaking group 21.039 at the meeting in December 2010 and also to the rulemaking subgroup 21.039(f) at the meeting in February 2011. The elements referenced in the operational requirements address determination of the operator's individually configured aircraft. Aligning determination elements of CS-CCD with the operational requirements would require a lot more information to be developed and provided by the applicant, such as location and type of portable safety and emergency equipment, type specific emergency procedures, which are not within the scope of activity of an applicant applying for an OSD approval.

13. Aircraft difference table (ADT)

Some commentators were of the opinion that the content of the aircraft difference table was too detailed and the elements were not type specific. The commentators suggested that the table is downgraded to a GM.

Content of ADT

The elements listed in the ADT were extensively discussed and agreed on by the NPA 2011-10 drafting group as type specific which cannot be configured on request of any operator. The elements listed in the ADT's part *'Determination elements'* have been revised, clarified where necessary, some elements have been deleted and other elements have been included as suggested by commentators.

Impact assessment

The ADT's part *'Impact assessment'* has been subject to extensive discussions within the group. The manufacturers represented in the group strongly opposed to be required to highlight to the operators information related to operator's procedures. The manufacturers, however, agreed to provision of such information on a voluntary basis (at request of the applicant). The notion of 4-columns, each implying a method of training to be used for cabin crew type specific training has been modified. The part *'Impact assessment'* consists of two columns - (a) and (b) - each consisting of two sub-columns. The applicant marks the corresponding sub-column(s) relevant to the identified difference, as opposed to marking only one corresponding sub-column as proposed in the NPA:

- Column (a) represents provision required from the applicant and mandatory application by the end user (operator/training organisation). The sub-column *'Impact on description of the element'* will be marked by the applicant when a difference has been identified, the information is included in the documentation provided by the applicant and the information needs to be provided to cabin crew. The sub-column *'Impact on operation of the element'* remains unchanged.
- Column (b) represents provision at request of the applicant (the applicant may elect to fill-in this column) and mandatory application by the end user (operator/training organisation). The purpose of the two sub-columns remains unchanged.

14. Cabin aspects of special emphasis (CASE)

One commentator suggested that in order to harmonise CS-CCD with Certification Specifications for Flight Crew Data (CS-FCD), the Training areas of special emphasis (TASE) should be included in CS-CCD as well. In TASE the applicant would identify all type specific knowledge and skills requirements.

As CS-CCD deals with provision of data by the applicant, as opposed to CS-FCD which deals with type specific training requirements, the concept of TASE, as used in CS-FCD, could not be applied to CS-CCD.

However, the idea of a similar concept that would include any information that end users and cabin crew should be aware of, such as information identified during emergency evacuation demonstration required by CS 25.803 or any other unique elements identified during the certification process, was supported by all group members. Therefore, a new Subpart was included in CS-CCD to address the concept. The new Subpart D is titled Cabin aspects of special emphasis (CASE). CASE is classified in Box 1 and Box 2 of the OSD box concept due to the resulting mandatory and non-mandatory status for the operators which will only be defined by the applicant at the time the results are known.

15. Appendix 1 to CS CCD.310

Some commentators suggested deleting some data listed in the Appendix 1 to CS CCD.310. This data is, however, already provided by manufacturers today and the Agency is of the opinion that provision of this data should not be discontinued. The Appendix 1 to CS CCD.310 is classified into Box 1 of the OSD box concept. The applicant will provide data, listed in the Appendix, only on those elements which are applicable to

the candidate aircraft. The application of the data by end users is mandatory. Operators expressed concern about the mandatory application of the data, as the list includes some aircraft technical specifications and the operators are of the opinion that not all technical information about the aircraft type has relevance to cabin crew. The data resulting from the referenced Appendix and Subpart D is to be used for developing training programmes for cabin crew, for establishing procedures and is to be included in operator's operations manual as reference information for cabin crew to obtain general knowledge on the type of aircraft they are to be qualified on, so that cabin crew have access to this information, if necessary. The Agency is developing AMC and GM to the relevant paragraphs of Part-ORO, Subpart CC on the explanation of mandatory and non-mandatory application by the end user.

16. Syllabus for cabin crew training

Some commentators expressed dissatisfaction with the change of the OSD scope with regard to cabin crew. The change is related to the provision of *data* instead of provision of *minimum syllabus* for cabin crew type rating training as initially reflected in the Terms of Reference (ToR) for the rulemaking task 21.039. This is the result of an agreement reached in the course of drafting the NPA 2009-01 by the rulemaking group 21.039.

17. Passenger seating capacity

Due to inconsistencies with regard to different usage and interpretation of the term in regulatory materials, the group agreed that for the purpose of CS-CCD the term '*passenger seating capacity'* is to be used. The term refers to the passenger seating capacity of an aircraft that is subject to initial TC process as specified in the relevant type certification data sheet. The term also refers to the maximum passenger seating configuration of an individually configured aircraft.

18. OSD box concept

Some commentators recommended illustrating in the CS-CCD which box of the OSD concept the individual paragraphs belong to. A new paragraph *CS CCD.110 OSD box concept - status of provided data* was created and includes the classification of individual paragraphs of CS-CCD within the OSD box concept. The newly created paragraph is complemented by the *Appendix 1 to CS CCD.110 OSD box concept – status of provided data* for a clearer illustration and explanation of the OSD box concept.

19. Subpart C: Type specific data for cabin crew vs. Type specific data for cabin crew training

Following extensive discussions within the group on the data of Subpart C and its application by the end user (operator/training organisation), the word '*training*' was deleted from the title. The title now reads 'Type specific data for cabin crew' which reflects the notion of CS-CCD data and its application by the end user more accurately.

V. CRD table of comments and responses

(General Comments)	-

comment	*1* comment by: *FAA* The FAA appreciates the opportunity to review the Notice of Proposed Amendment (NPA) 2011-10, Draft Decision of the Executive Director of the European Aviation Safety Agency on Certification Specifications and Guidance Material related to the Operational Suitability Data "Certifications Specifications-Cabin Crew." The FAA supports the provisions for EASA membership states in the proposal and has no comments at this time.
response	*Noted* NOTED Thank you for the support.

comment	*4* comment by: *NCCU* In general the NCCU supports the NPA. Cabin crew requires thorough basic knowledge regarding each aircraft type. To achieve this a harmonized description of a minimum syllabus of training for each aircraft type is required. Examples of consequences of unsatisfactory tecnical training are the accidents in Dryden and Kegworth. A basic program for the operational elements regarding cabin crew on different aircraft types and, depending on the differences, variants should be outlined by the aircraft manufacturers and thus available as a tool for the NAAs and the operators. In order for it to be effective and open, and that minimum standards are complied with, this should be linked to the Operational Suitability Data. The basic operational program would also be of help for writing more elaborate operational procedures into the Operations Manual by the individual operator.
response	*Noted* NOTED Thank you for the support. The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

comment

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

The Swedish Transport Agency, Civil Aviation Department (SCAA) has reviewed NPA 2011-10. The SCAA welcome a harmonised approach in this area. The CS closes a potential gap between aircraft design and operations and enhance coordination between experts in operations and design. Thus the SCAA find the proposal acceptable. However the SCAA have some comments which is presented in relevants parts of the NPA.

response

Noted

NOTED

Thank you for the support. The comment in the relevant part of the NPA has been addressed; please refer to the responses to the comments #9 and #11 of the same commentator.

comment

10 comment by: *Cessna Aircraft Company*

Cessna Aircraft Company has no comment on this issue at this time.

response

Noted

NOTED

comment

36 comment by: *AIRBUS*

One may argue that the Basic Regulation mandates the TC Holder to cover Cabin Crew aspects, but it is in fact more an agency interpretation of the basic rule that states:

Article 5, Airworthiness, paragraph 5(e):

"*5. […] Those measures shall specify in particular:*

[…]

(e) conditions for issuing, maintaining, amending, suspending or revoking type-certificates, restricted type-certificates, approval of changes to type-certificates, individual certificates of airworthiness, restricted certificates of airworthiness, permits to fly and certificates for products, parts or appliances, including:

[…]

(iv) the minimum syllabus of maintenance certifying staff type rating training to ensure compliance with paragraph (2)(f);

(v) the minimum syllabus of pilot type rating and the qualification of associated simulators to ensure compliance with Article 7;

(vi) the master minimum equipment list as appropriate and additional airworthiness specifications for a given type of operation to ensure compliance with Article 8;"

In fact the Agency considers that this was required due to the link in the last § to Article 8 of the Basic Regulation. However the Article 8 of Basic Regulation relates to Air Operations, and is applicable to Operators, NOT to TC Holders.

Having said that and in order to have CS that support the Part 21 text that

mandates TC Holders to provide data for cabin crew, the EASA proposal has been carefully considered, and Airbus support the idea of providing the type specific data to ensure that training providers and operators have the necessary type specific elements for the development of training program. It is very important that a clear distinction be established between the TC Holder responsibilities and those of training organisations, reason why Airbus fully supported the proposal for the data, but not the one for a training syllabus. A TC Holder is NOT a training organisation.

response *Noted*

NOTED

Thank you for your comment.

comment *37* comment by: *AIRBUS*

Airbus is still very concerned that the proposed CS describes technical data but in no way criteria for approval of the data. It is rather easy to provide data, but what is far more complex and is not addressed at all in the CS is the definition of the criteria and processes for their approval.

response *Noted*

NOTED

The Agency will develop the evaluation/approval process based on the final outcome of the CS-CCD. The evaluation criteria will be available on the Agency's website.

comment *38* comment by: *AIRBUS*

In order to make easily the link with the Part 21 § 21A.15 (d) and its associated GM, Airbus strongly recommend to illustrate within the CS Cabin Crew what elements belong to each box, as it is currently stated in the GM: "The exact content of the four boxes in the above figure is determined by the certification specification that is applicable to the specific element."

In addition, and due to the incoming change of the Air Operations rules (AR, OR...) and rewording ongoing, Airbus is extremely concerned that the benefit of all work conducted for an adequate OSD "system" may be lost if the relevant references in the various other parts (from FCL and ORO-CC, ORO-FC, and eventually former AR) are not adequately put in place. In such a case TC Holders will be mandated to go for a heavy evaluation process to produce OSD that will be useless, since there will be no mandatory requirements for Training Organisations and Operators to rely on this outcome.

response *Accepted*

Comment #01: "In order to make easily the link…"

ACCEPTED

The OSD box concept is reflected in the newly created *CS CCD.110 OSD box concept - status of provided data* and its associated *Appendix 1 to CS CCD.110 OSD box concept - status of provided data*.

Comment #02: "In addition, and due to the incoming change of the Air Operations rules…"

NOTED

The Agency is developing the relevant links.

comment

50 comment by: *TFC Simulatoren und Technik GmbH*

To whom it may concern,

We reference to NPA No. 2011-10 Certification Specifications - Cabin Crew,

which discuss a new type and a variant for cabin crew operation and provision of A/C type specific data for the development of relevant training programmes for cabin crew.

In order to provide uniformity in training, training hardware should be levelled as well. A similar standard as for the FSTD is not available for cabin crew devices and interpretation of EU-OPS requirements may lead to a lack of uniformity in cabin training. How to determine training programmes if the the design of the training hardware being used leaves too much scope for interpretation? We are in the meaning that there should be a standardised manner for training hardware in the same way.

Manufacturers, operators and users of the these training devises will benefit from a European wide qualification.

response

Noted

NOTED

The Agency appreciates the commentator's suggestion; however, currently the Basic Regulation does not provide a similar legal basis to regulate training devices for cabin crew as it does for FSTD. Therefore, this issue cannot be addressed at this stage.

comment

56 comment by: *Dassault Aviation*

It should be specified that this CS-CC is only relevant for Cabin Crew being entitled to deal with cabin safety tasks (indeed, any personnel wearing a uniform is a cabin crew, as per definition; however, in business aircraft operations, a lot of operators choose to entitle their cabin crew with commercial assistance only; cabin safety tasks remain the responsibility of the captain or the copilot). This would avoid misinterpretation that any Cabin Crew should follow such a training.

response

Noted

NOTED

The applicability of CS-CCD is specified in *CS CCD.100 Applicability*.

The definition of cabin crew is specified in Annex I of Opinion 4/2011 Air Operations:

'Cabin crew member' means an appropriately qualified crew member, other than a flight crew or technical crew member, who is assigned by an operator to perform duties related to the safety of passengers and flight during operations.

comment 63 comment by: DGAC FRANCE

General comment:

The whole NPA goes too far in details and requires overmuch task. The aircraft difference table contains too much detail, which may lead systematically, from minor differences in the table, to identify often too many variants and types. The consequence will enlarge the involved training for cabin crews.

response *Noted*

NOTED

DGAC FR has been a part of the NPA 2011-10 drafting group and the review group. Every element of CS-CCD and comments received to NPA 2011-10 have been carefully considered and amended in agreement with the review group.

comment 64 comment by: DGAC FRANCE

General comment:

We raise the very important following point:

We note that GM N° 3 to 21A 15 (d) contains the concept of BOXES (Box 1, Box 2, Box 3 and Box 4).

We note that the CS-FC (CS-Flight Crew) NPA draft will include an appendix 3 to CS-FC Book 1 to explain clearly which paragraph is mandatory, which paragraph is recommended.

The purpose of this concept is to avoid confusion on what is mandatory versus recommended for the operator. DGAC France concurs it is useful. Therefore:

The same exercise of classification shall be done with the CS-CC according to OSD classification (box 1, 2, 3, 4).

response *Accepted*

ACCEPTED

The OSD box concept is reflected in the newly created *CS CCD.110 OSD box concept - status of provided data* and its associated *Appendix 1 to CS CCD.110 OSD box concept - status of provided data*.

comment 65 comment by: DGAC FRANCE

General comment:

All the data which doesn't have direct effect on safety and on emergency procedures should be removed from this CS-CC. Obviously such items will be included in the training program of the operator, based on the information he gets on a contractual basis from the type holder.

In any case, such data not directly relevant to safety shall not be listed in the « mandatory » part of the document.

response *Not accepted*

NOT ACCEPTED

The CS-CCD addresses provision of comprehensive data about the concerned aircraft by the applicant (manufacturer/design organisation) to the end users (operators/training organisations). The data is to be used by the end users for the development of training programmes for cabin crew, for the establishment of procedures and as reference information for cabin crew in operations manual about the aircraft they are to be qualified on.

comment *66* comment by: *DGAC FRANCE*

General comment:

It seems that there are terms too much oriented close to some manufacturer systems (eg: SPDB, FAP…) or a specific design. It would be better to use generic terms.

response *Accepted*

ACCEPTED

There are no generic terms for the systems in question; therefore, examples from the existing manufacturers' productions were used in the NPA. However, the comment was taken into account with the following results: *SPDB* example was deleted, instead the term '*circuit breakers systems*' is used; a new term '*cabin management system panel*' was created to address FAP (Airbus)/ CSCP(Boeing).

comment *67* comment by: *DGAC FRANCE*

General comment:

The CS-CC describes a process to identify variants and types and items to be developed in the trainings for cabin crew. According to Part ORO CC 250, the operator again has to perform a similar analysis on those criteria to create his training program. We note that the level of subject is not the same. Also the operator shall reuse, when available, the output of data provided by TCH according to CS-CC.

We have already said in another general comment that CS-CC should develop only necessary items toward safety, in the area of cabin evacuation, doors and exits.

We also recommend increasing consistency with a modification of Part ORO CC 250 such as:

ORO.CC.250 Operation on more than one aircraft type or variant

(a) (1) For the purpose of cabin crew training and qualification, each individual aircraft operated shall be determined to be of a type or of a variant.

(2) For the determination required in (a) (1) above, variant of an aircraft type shall be considered as different types for the purpose of cabin crew training and qualifications when they are not similar in one or more of the following aspects:

(i) emergency exit operation ;

(ii) location and type of portable safety and emergency equipment; and

(iii) type-specific emergency procedures.

(3) in order to achieve (a) (2), the operational suitability data established in accordance to Part 21 shall be considered.

(b) Cabin crew members shall not be assigned to operate on more than three aircraft types determined in accordance with (a), except that, with the approval of the competent authority, cabin crew members may be assigned to operate on four aircraft types provided that for at least two of the types :

(1) safety and emergency equipment and type-specific normal and emergency procedures are similar; and

(2) non-type-specific normal and emergency procedures are identical.

response *Not accepted*

NOT ACCEPTED

Part-ORO.CC.250 has been discussed and agreed by the EASA Committee. CS-CCD relates to the level of the applicant (manufacturer/design organisation) and EASA, i.e. type specific elements of the concerned aircraft, whereas the process at the operations level relates to an individual aircraft configuration (customised - ordered by an individual operator). Therefore, the elements, which are considered by both processes, are not and cannot be consistent.

comment *79* comment by: *AEA*

Attachment #1

Please see attached.

response *Partially accepted*

Comment #01:

NOT ACCEPTED

CS-CCD complements Opinion 07/2011 Operational Suitability Data. With regard to cabin crew, both the former Joint Operational Evaluation Board (JOEB) and the current EASA OEB CC have a wider scope than the NPA 2011-10.

The Regulation 216/2008 in the Article 5(5)(e)(vi) in conjunction with Articles 18(c) and 19(2)(a) provides the legal basis to issue Certification Specifications for cabin crew to ensure compliance with point 7.b. of Annex IV to Regulation 216/2008.

NPA 2011-10 does not deal with type rating matters as suggested by the commentator. The initial scope of the Rulemaking task 21.039 reflected in the Terms of Reference was amended in the course of drafting the NPA 2009-01 and the rulemaking group 21.039 agreed on requiring the provision of *'type specific data'* and *'determination of a new type or variant'* for cabin crew instead of a syllabus for training. Thus, NPA 2011-10 foresees the determination of a candidate aircraft as a new type or variant for cabin crew operation and the provision of data by the applicant to the end user. The provided data will support end users in development of training programmes for cabin crew (mandated by the relevant regulatory requirements). The provided

data further includes any additional information that cabin crew and end users should be aware of. This data may be used by end users for establishment of procedures and/or as additional reference information in operator's operations manual about the aircraft type cabin crew are to be qualified on.

AEA approached the Agency in September 2011 regarding CS CCD.210 Determination of a new type, being specifically concerned about the wording "…one or more of the type specific elements…are neither identical, nor similar to the base aircraft" that might have resulted in an increased number of types for cabin crew. This concern has been taken into account and the CS CCD.210 has been revised and modified.

Comment #02:

Comment does not refer to NPA 2011-10.

Comment #03:

NOT ACCEPTED

CS-CCD relates to the level of manufacturer/design organisation (hereafter referred to as the "applicant") and the Agency. CS-CCD addresses provision of comprehensive data about the concerned aircraft by the applicant to end users (operators/training organisations). As this data is already provided by the applicant today, the Agency is of the opinion that provision of this data should not be discontinued.

Comment #04:

NOT ACCEPTED

CS-CCD relates to the level of the applicant and the Agency, i.e. type specific elements of the concerned aircraft that cannot be changed (configured) on request of any operator. ORO.CC.130 refers to operator's Differences training for cabin crew with regard to operator's individually configured aircraft. The elements listed in ORO.CC.130(a)(2) are not within the scope of CS-CCD.

Comment #05:

ACCEPTED

A definition of "passenger deck" was created for the purpose of CS-CCD. The definition is included under CS CCD.105(e).

Comment #06:

ACCEPTED

Moved to CS CCD.205(b)(2)(i).

Comment #07:

NOT ACCEPTED.

Present wording is considered to be specific enough.

Comment #08:

Comment not understood.

Comment #09:

NOTED

The assessment criteria for the evaluation of the identified differences and their impact are yet to be developed by the Agency based on the final outcome of CS-CCD. Once developed, the criteria will be available on the Agency's website.

Comment #10:

The example provided by the commentator refers to the operations level; such

differences are to be assessed by the operator in accordance with the operational requirement ORO.CC.250. This is not within the scope of CS-CCD.

Comment #11:

ACCEPTED

CS CCD.210 has been revised and modified.

Comment #12:

NOT ACCEPTED

EU-OPS refers to the level of operator and *OPS 1.1030(b) Operation on more than one type or variant* considers emergency exit operation, location and type of portable safety equipment and type specific emergency procedures.

Part-ORO.CC.250 has been discussed and agreed by the EASA Committee.

CS-CCD relates to the level of the applicant and the Agency, i.e. type specific elements of the concerned aircraft that cannot be changed (configured) by any operator, whereas the process at the operations level relates to the individually configured aircraft by the particular operator. Therefore, the elements, which are considered, are not and cannot be consistent.

Comment #13:

Please, refer to the response to the comment #09 of the responses to AEA.

Comment #14:

NOT ACCEPTED

The commentator's proposal was discussed with the NPA 2011-10 review group and it was not accepted. The OSD/CS-CCD is applicable to manufacturers/design organisations (applicant); the aircraft difference table (further "ADT") included in Appendix 1 to CS CCD.200(b)(1) is a document to be used in the evaluation process conducted on the level of the applicant and the Agency. The operator is the end user of the approved resulting information.

Comment #15:

NOT ACCEPTED

The headings of the ADT have been maintained. The approach of "determining similarity of elements" was replaced with "identifying differences", hence the term '*similar*' is not used throughout the CS-CCD text any longer. Please refer to the modified CS CCD.210.

Comment #16:

ACCEPTED

The comment does not state the location of the proposed deletion of "rotorcraft" within the CS-CCD. It is assumed that the proposal referred to CS CCD.205(b)(1)(iii), which was deleted in its entirety after discussions during the NPA 2011-10 review group meeting.

Comment #17:

Please, refer to the response to the comment #05 of the responses to AEA.

Comment #18:

NOT ACCEPTED

The comment was discussed with the NPA 2011-10 review group and it was not accepted. "Exterior emergency lighting" maintained in ADT.

Comment #19:

NOT ACCEPTED

The Agency believes that the text as presented provides clarity.

Comment #20:

ACCEPTED

Please refer to CS CCD.210 which has been revised and modified.

Comment #21:

NOT ACCEPTED

CS-CCD relates to the level of the applicant and the Agency. CS-CCD addresses provision of comprehensive data about the concerned aircraft by the applicant (manufacturer/design organisation) to end users (operator/training organisation). As this data is already provided by the applicant today, the Agency is of the opinion that provision of this data should not be discontinued.

Therefore, the requests to delete the referenced parts of Subpart C, as entered by the commentator, have not been accepted. Additional responses to some specific issues have been included; please refer to the responses 21(a)-21(g).

Comment #21(a):

Comment refers to operational requirements which are not within the scope of NPA 2011-10.

Comment #21(b):

NOT ACCEPTED

Data referenced under CS CCD.305(a)(2)-(a)(5) represents provision at request of the applicant (the applicant may elect to provide the data), i.e. provided that the applicant supplies the components, thus is in possession of the associated data; this was agreed by the members of the rulemaking subgroup 21.039(f).

Comment #21(c):

PARTIALLY ACCEPTED

Please refer to the definition of "passenger seating capacity" in CS CCD.105(f), which was created for the purpose of CS-CCD.

Comment #21(d):

NOT ACCEPTED

Installed seat types may have differences in features. It is the responsibility of the end user to communicate the information on aircraft flight crew compartment's seat type(s), which the end user receives through OSD/CS-CCD, to cabin crew in order to comply with ORO.CC.125(c)(vii).

Comment #21(e):

NOT ACCEPTED

Crew seats installed in the cabin compartment may differ in features (operator may decide to have crew seat types with different features installed in the cabin of an individually configured aircraft). It is the responsibility of the end user to communicate the information on the aircraft's crew seat type(s), which the end user receives through OSD/CS-CCD, to cabin crew as required by AMC1 ORO.CC.125(c)(a)(9).

Comment #21(f):

Please, refer to CS 25.813(b).

Comment #21(g):

NOT ACCEPTED

CS-CCD deals with provision of comprehensive data about the aircraft by the applicant to end users. The end user has the responsibility to communicate the relevant information to cabin crew.

Comment #22:

NOT ACCEPTED

The Agency appreciates the commentator's proposal to include additional technical specifications in the CS-CCD. The proposal to include the elements referenced by the commentator was discussed by the NPA 2011-10 review group and it was concluded that the proposed elements were purely aircraft design-related or related to certification of the aircraft. Some of the referenced elements are currently referred to in the aircraft maintenance manual (AMM) and/or in the aircraft flight manual/flight crew operations manual (AFM/FCOM). The proposal to include these elements in CS-CCD was, therefore, not accepted by the review group.

TITLE PAGE p. 1

comment *23* comment by: *UNSA-SMAF*

In general the UNSA supports the NPA. Cabin crew requires thorough basic knowledge regarding each aircraft type. To achieve this a harmonized description of a minimum syllabus of training for each aircraft type is required. Examples of consequences of unsatisfactory tecnical training are the accidents in Dryden and Kegworth.

A basic program for the operational elements regarding cabin crew on different aircraft types and, depending on the differences, variants should be outlined by the aircraft manufacturers and thus available as a tool for the NAAs and the operators. In order for it to be effective and open, and that minimum standards are complied with, this should be linked to the Operational Suitability Data. The basic operational program would also be of help for writing more elaborate operational procedures into the Operations Manual by the individual operator.

response *Noted*

NOTED

Thank you for the support.

The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

EXECUTIVE SUMMARY p. 2

comment 2 comment by: *Swiss International Airlines / Bruno Pfister*

General Comment:

The whole NPA goes far beyond the intentions of the EU legislator which was to have a simple transfer of the JAA Joint Operations Evaluation Board (JOEB) process into EASA framework. Please refer as well to the AEA comments to the EASA CRD for NPA 2009-1 (OSD).

In our view, there is no legal basis and no justification to link cabin crew training and type rating matters to the OSD. Moreover, SWISS is extremely concerned that based on this EASA proposal, the amount of types for cabin crew would increase. This will lead to substantial costs for the airlines which have not been justified on safety grounds. We urge EASA to stick the requirements of Subpart O of EU-OPS rather than trying to reinvent the wheel.

Moreover, we note that the so-called EASA scientific and medical evaluation of Subpart O was never published by EASA. There is therefore no justification for EASA to alter the proven requirements of Subpart O.

Furthermore this proposal tries to expand the role of the cabin crew member (please refer to p.8, item 30) with regards to aircraft type specific elements which are under the responsibility of the flight crew. This intent will enlarge the involved training for Cabin Crews with no proven safety benefit. Additional costs are raised as well.

SWISS therefore urges EASA to reconsider this flawed NPA and realign with Subpart O of EU-OPS.

Specific Comments

CS-CC-210 Determination of a new type

(a) The candidate aircraft is determined a new type:

(1) if so documented in the application and demonstrated to the Agency; or

(2) as a result of the determination process required by CS-CC-200.

(b) For the purpose of (a)(2), the candidate aircraft is determined a new type if one or more of the type specific elements of CS-CC-205(b)(1) and (b)(2) are neither identical nor similar to the base aircraft.

Self-help exits alone, for example Type III and Type IV exits, need not be a factor to determine candidate aircraft as a new type.

(c) If no differences are identified in the type specific elements of CS-CC-205(b)(1) and (b)(2) but differences are identified in the type specific elements of CS-CC-205(b)(3) and/or (b)(4), the impact of the differences is assessed and possible determination of the candidate aircraft as a new type is considered.

Comment In the case of CS-CC-205(b)(1) (aircraft configuration) and (b)(2) (doors and exits) only the differences are taken into account in the text. We propose to consider the impact as documented in the aircraft difference table. The reason is for instance in the case of an aircraft which would be leased and equipped with slide rafts only used as slides because the operation area does not request for slides raft, there is no impact for the cabin crew in comparison with a slide equipped aircraft of the same type. Otherwise it would mean that a same aircraft type only equipped with slide raft used as slides would be another aircraft type.

Another issue is the number of doors for a stretched version which is different from the base aircraft therefore, in accordance with the difference table of Appendix 1 to CS-CC-200(b)(1) and CS-CC-210 the candidate aircraft is considered a new type even if the doors are identical.

Stretched version should not be automatically considered as a new type if the impact for cabin crew is minor.

Bear in mind the EU OPS requirement:

OPS 1.1030 Operation on more than one type or variant

(a) An operator shall ensure that each cabin crew member does not operate on more than three aeroplane types except that, with the approval of the Authority, the cabin crew member may operate on four aeroplane types, provided that for at least two of the types:

1. non-type specific normal and emergency procedures are identical; and

2. safety equipment and type specific normal and emergency procedures are similar.

(b) For the purposes of subparagraph (a) above, variants of an aeroplane type are considered to be different types if they are not similar in all the following aspects:

1. emergency exit operation;

2. location and type of portable safety equipment; and

3. type specific emergency procedures.

EU OPS only considers emergency exits operations and type specific emergency procedures.

Proposal

We propose the following text:

(b) For the purpose of (a)(2), the candidate aircraft is determined a new type if one or more of the type specific elements of CS-CC-205(b)(1) and (b)(2) are neither identical nor similar to the base aircraft *and have a significant impact on operations and procedures in comparison with the base aircraft*.

Appendix 1 to CS-CC-200(b)(1)

For the purpose of filling in the aircraft difference table, the applicant selects the base and the candidate aircraft.

The aircraft difference table complies with the following format, or equivalent in accordance with CS-CC-200(b)(2).

Comment

It is stated that the base aircraft is selected by the applicant. This is a major point which may lead to different analysis.

Two different points of views may be considered:

* Manufacturer point of view: the base aircraft is the one produced before the candidate aircraft. This is probably a logical way for the aircraft manufacturer who wants to have the OSD ready for the first European customer.

* Airline point of view: the base aircraft may be the one on which the basic training is performed which may not be the same base aircraft as for the historical way. This logic is training and practice oriented from the operator perspective.

Depending on the one who decides which the base aircraft is, we can anticipate

that the result could be quite different in terms of impact.

We propose that the operator may submit an alternative table of difference if he wishes to take a different base aircraft than the one proposed by the aircraft manufacturer.

Proposal

For the purpose of filling in the aircraft difference table, the applicant *or the operator* selects the base and the candidate aircraft.

The aircraft difference table complies with the following format, or equivalent in accordance with CS-CC-200(b)(2).

Appendix 1 to CS-CC-200(b)(1) Aircraft difference table

Comment

In order to be consistent with § CS-CC-210 the column named "Existing difference from base aircraft" should be renamed: "Element identical or similar to base aircraft"

This should take into account the similarity as stated in CS-CC-210.

response

Noted

Please refer to the responses to comment #79, commentator AEA, specifically to the Comments 01/02/03/09/10/11/12/13/14/15.

A. EXPLANATORY NOTE - IV. Content of the draft Decision p. 5-8

comment *3* comment by: *NCCU*

Regarding bullet point18

It is of utmost importance that the NAAs have a detailed description of a uniform syllabus of cabin crew training for approval of cabin crew training manuals.

response

Noted

The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

comment *5* comment by: *NCCU*

Re bullet point 29

The wording "type spesific data for cabin crew" should be in line with what is required for pilots and maintenance personnel - and thus changed to "minimum syllabus of training".

Originally in the terms of reference EASA suggested that the minimum syllabus of cabin crew training should be part of the Operational Suitability Data (OSD) It was at that time labeled differently (TSC). This was a suggestion that we could have supported.

However this wording has been strongly opposed, and an agreement has been difficult to achieve. The discussions in the group has been going on for several years and in the current proposal from the Agency for amending Regulation 1702/2003 (part 21) to include the Operational suitability Data concept it states type specific data for cabin crew training while endorsing the minimum syllabus of pilot type rating training, including determination of type rating and the core aircraft reference data to support the qualification of associated simulators and the minimum syllabus of maintenance certifying staff type rating training including determination of type rating

This illustrates a watering down of cabin crew training that we find unacceptable. Compared to what the terms of reference say the result is unfair treatment of cabin crew and thus cabin safety standards. The result could in the end be that Europe ends up with harmonized type rating training for pilots and maintenance but not for cabin crew. In fact this could leave variations not only with the National Aviation Authority but also variations from operator to operator. This is completely unacceptable and type specific data will not cover the training.

The task on cabin crew was to streamline additional airworthiness specification for a given type of operation including minimum syllabus of cabin crew type rating training requirements, determination of variant or type for cabin crew qualification, conditions for mixed fleet flying operations by flight and cabin crew and to determine how this should be done.

response *Noted*

NOTED

The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation. In addition, the conditions for operations on more than one type or variant specified in ORO.CC.250. are to be taken into account.

comment *12* comment by: *ETF*

Point 8: ETF support NPA 2011-10, and believe that the development of relevant training programs for cabin crews, and the evaluation and assessment of relevant elements that needs to be considered for determining an aircraft as a new type and variant, will reduce risk of human errors during normal and emergency procedures.

response *Noted*

NOTED

Thank you for the support.

comment	*13* comment by: *ETF* Point 16: In order to determinate a candidate aircraft as a new type or variant, we agree with the OSD (Operational Suitability Data) concept and with using different levels of training methods for cabin crews. In ETF opinion if a minimum syllabus for type rating training concept it is introduce, the new concept will be effectiveness and will achieved harmonization of type rating training in all Europe without leave variations with National Aviation Authorities and from operator to operator. Point 18: It is of utmost importance that the NAAs have a detailed description of
response	*Noted* NOTED The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation. Based on the outcome of the NPA 2011-10 review group meetings, the 4-column system proposed in the NPA has been modified. Please, refer to the Appendix 1 to CS CCD.200(b)(1) and to GM1, GM2, GM3 to Appendix 1 to CS CCD.200(b)(1).

comment	*14* comment by: *ETF* Point 25: In order to eliminate risk of human errors, disorientation and mistakes in performances, due to a high number of differences and similarities elements on an aircraft configuration, it is in our opinion that impact of differences shall be taken into account when determining a new type of aircraft. Point 28/29: ETF support the Agency idea that ADT has to contain 4 columns, each of it implying a training method to attain the required knowledge to facilitate the Type/variant evaluation, this will especially support training providers in the development of their training programs and will provide more knowledge to cabin crews in assisting flight crews in safety related matters.
response	*Noted* NOTED Thank you for the support. Based on the outcome of the NPA 2011-10 review group meetings, the 4-column system proposed in the NPA has been modified. Please, refer to the Appendix 1 to CS CCD.200(b)(1) and to GM1, GM2, GM3 to Appendix 1 to CS CCD.200(b)(1).

comment 15 comment by: *UK CAA*

Page No: 8 – Explanatory Note

Paragraph No: 30

Comment: The text states that cabin crew need to have access to technical information to assist with communication in abnormal situations. Subsequent text states that the detailed level of technical information does not have to be included in checking or examination processes unless it is included in the operational requirements.

Justification: If cabin crew are not required to be trained or tested on such information, they are unlikely to either read or retain it and therefore it will not be of any assistance in an emergency situation.

Proposed Text: Limit the technical information to that required by ORO.CC.125 and AMC1 OR.OPS.CC.125 (b) Aircraft type specific training.

response *Not accepted*

NOT ACCEPTED

The extra technical information provided through OSD/CS-CCD may not be subject to checking and/or examination (according to the relevant regulatory requirement unless otherwise specified by the particular operator). However, this information should be available to cabin crew as a reference in case cabin crew are required to pass on the essential information or if required to act as necessary, e.g. toilet vacuum system in case of failure of aircraft toilets in-flight, closure of flush valve, flight lock, effect of lingering smoke in detector sensors, main landing gear mechanical system indicator, electrical anti-icing/pneumatic de-icing system, tail skid/tail prop, etc.

ORO.CC.125 and AMC1-ORO.CC.125(c) and (d) include a list of training subjects cabin crew are required to be trained on. The purpose of the CS-CCD is the provision of comprehensive data about the aircraft type by the applicant to end users which the end users utilise to satisfy the training subjects.

comment 24 comment by: *UNSA-SMAF*

Point 8: UNSA support NPA 2011-10, and believe that the development of relevant training programs for cabin crews, and the evaluation and assessment of relevant elements that needs to be considered for determining an aircraft as a new type and variant, will reduce risk of human errors during normal and emergency procedures.

Point 16: In order to determinate a candidate aircraft as a new type or variant, we agree with the OSD (Operational Suitability Data) concept and with using different levels of training methods for cabin crews.

In UNSA opinion if a minimum syllabus for type rating training concept it is introduce, the new concept will be effectiveness and will achieved harmonization of type rating training in all Europe without leave variations with National Aviation Authorities and from operator to operator.

Regarding bullet **point18** :It is of utmost importance that the NAAs have a detailed description of a uniform syllabus of cabin crew training for approval of cabin crew training manuals.

Point 25: In order to eliminate risk of human errors, disorientation and mistakes in performances, due to a high number of differences and similarities

elements on an aircraft configuration, it is in our opinion that impact of differences shall be taken into account when determining a new type of aircraft.

Point 28/29: UNSA support the Agency idea that ADT has to contain 4 columns, each of it implying a training method to attain the required knowledge to facilitate the Type/variant evaluation, this will especially support training providers in the development of their training programs and will provide more knowledge to cabin crews in assisting flight crews in safety related matters.

Re bullet point 29:

The wording "type specific data for cabin crew" should be in line with what is required for pilots and maintenance personnel - and thus changed to "minimum syllabus of training".

Originally in the terms of reference EASA suggested that the minimum syllabus of cabin crew training should be part of the Operational Suitability Data (OSD) It was at that time labeled differently (TSC). This was a suggestion that we could have supported.

However this wording has been strongly opposed, and an agreement has been difficult to achieve. The discussions in the group has been going on for several years and in the current proposal from the Agency for amending Regulation 1702/2003 (part 21) to include the Operational suitability Data concept it states type specific data for cabin crew training while endorsing the minimum syllabus of pilot type rating training, including determination of type rating and the core aircraft reference data to support the qualification of associated simulators and the minimum syllabus of maintenance certifying staff type rating training including determination of type rating

This illustrates a watering down of cabin crew training that we find unacceptable. Compared to what the terms of reference say the result is unfair treatment of cabin crew and thus cabin safety standards. The result could in the end be that Europe ends up with harmonized type rating training for pilots and maintenance but not for cabin crew. In fact this could leave variations not only with the National Aviation Authority but also variations from operator to operator. This is completely unacceptable and type specific data will not cover the training.

The task on cabin crew was to streamline additional airworthiness specification for a given type of operation including minimum syllabus of cabin crew type rating training requirements, determination of variant or type for cabin crew qualification, conditions for mixed fleet flying operations by flight and cabin crew and to determine how this should be done.

response

Noted

The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation. Based on the outcome of the NPA 2011-10 review group meetings, the 4-column system proposed in the NPA has been modified. Please, refer to the Appendix 1 to CS CCD.200(b)(1) and to GM1, GM2, GM3 to Appendix 1 to CS CCD.200(b)(1).

comment	*51* comment by: *SCCA/ head of health and safety* Point 8: I support NPA 2011-10, and believe that the development of relevant training programs for cabin crews,will reduce risk of human errors during normal and emergency procedures. Evaluation and assessment of relevant elements that needs to be considered for determining an aircraft as a new type and variant. The wording "type specific data for cabin crew" should be in line with what is required for pilots and maintenance personnel - and thus changed to "minimum syllabus of training". Originally in the terms of reference EASA suggested that the minimum syllabus of cabin crew training should be part of the Operational Suitability Data (OSD) It was at that time labeled differently (TSC). This was a suggestion that was supported.
response	*Noted* Thank you for the support. The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

comment	*52* comment by: *SCCA/ head of health and safety* Point 16: In order to determinate a candidate aircraft as a new type or variant, I agree with the OSD (Operational Suitability Data) concept and with using different levels of training methods for cabin crews. In my opinion if a minimum syllabus for type rating training concept it is introduce, the new concept will be effectiveness and will achieved harmonization of type rating training in all Europe without leave variations with National Aviation Authorities and from operator to operator.
response	*Noted* Thank you for the support. The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation. Based on the outcome of the NPA 2011-10 review group meetings, the 4-column system proposed in the NPA has been modified. Please, refer to the Appendix 1 to CS CCD.200(b)(1) and to GM1, GM2, GM3 to Appendix 1 to CS CCD.200(b)(1).

comment	*53* comment by: *SCCA/ head of health and safety* Point 25: Due to a high number of differences and similarities elements on an aircraft configuration and in order to eliminate risk of human errors, disorientation and mistakes in performances, it is in my opinion that impact of differences shall be taken into account when determining a new type of aircraft. Point 28/29: I support the Agency idea that ADT has to contain 4 columns, each of it implying a training method to attain the required knowledge to facilitate the Type/variant evaluation, this will especially support training providers in the development of their training programs and will provide more knowledge to cabin crews in assisting flight crews in safety related matters.
response	*Noted* Thank you for the support. Based on the outcome of the NPA 2011-10 review group meetings, the 4-column system proposed in the NPA has been modified. Please, refer to the Appendix 1 to CS CCD.200(b)(1) and to GM1, GM2, GM3 to Appendix 1 to CS CCD.200(b)(1).

comment	*57* comment by: *SCCA/ head of health and safety* bullet 18 It is of utmost importance that the NAAs have a detailed description of a uniform syllabus of cabin crew training for approval of cabin crew training manuals.
response	*Noted* The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

comment	*58* comment by: *SCCA/ head of health and safety* bullet 29 The wording "type specific data for cabin crew" should be the same that is required for pilots and maintenance personnel - suggestion of wording..... "minimum syllabus of training".
response	*Not accepted* The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific*

data' and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

B. DRAFT DECISION - SUBPART A p. 10

comment 16 comment by: *UK CAA*

Page No: 10 – Subpart A

Paragraph No: CS-CC-100

Comment: The applicability is limited to aircraft with more than 19 seats and any other aircraft on a voluntary basis. There is a third category which includes some aircraft fitted with only 19 seats (or less) which have a manufacturer requirement to operate with required cabin crew. These types of aircraft usually have unique cabin configurations and often have at least two exits disabled

Justification: If the manufacturer requires cabin crew to be carried then they should have a responsibility to provide appropriate information.

Proposed Text: Add "(c) aircraft with 19 seats or less which are required to carry cabin crew."

response *Accepted*

ACCEPTED

Included in *CS CCD.100(b).*

comment 28 comment by: *Luftfahrt-Bundesamt*

CS-CC-100 Applicability

These Certification Specifications are applicable to:

(a) aircraft with a maximum passenger seating configuration of more than 19 seats; and

(b) any other aircraft with a maximum passenger seating configuration of 19 seats or less if

voluntarily elected by the applicant to facilitate operations with cabin crew.

Do the a.m. numbers of passenger seats apply to the passenger seating capacity indicated in the TCDS or to the maximum approved passenger seating configuration (used by an individual operator) as defined in OPS 1?

Generally, a clear distinction between "passenger seating capacity" as used in the TCDS and the maximum (approved) passenger seating configuration (certified for and used by an individual operator) as defined in OPS 1 should be made.

Therefore, we would like to suggest to replace the term "maximum passenger seating configuration" under paragraphs (a) and (b) of the Section CS-CC-100 Applicability by the term "passenger seating capacity" in order to also cover large and large aeroplanes with less than 20 passenger seats installed but with complex door operating mechanisms and complex safety and emergency

equipment.

response *Accepted*

ACCEPTED

The term suggested by the commentator "passenger seating capacity" is used within the scope of the CS-CCD. Please, refer to the newly created definition under *CS CCD.105(f).*

comment *54* comment by: *Dassault Aviation*

CS-CC 105 (g)

The same definition of "Variant" should be used for Cabin Crew, Flight Crew and Maintenance Training (in CS-CC and in future CS-FC and CS-MCS). The definition of the CS CC seems appropriate but Dassault-Aviation would propose the following definition for the 3 CS:

"Variant: an aircraft or a group of aircraft within the same type that have significant differences to the base aircraft requiring differences training."

response *Partially accepted*

PARTIALLY ACCEPTED

Definition refers to one aircraft. The definitions of *'base aircraft'*, *'candidate aircraft'* and *'new type'* under CS CCD.105(b), (c) and (d) have been modified for consistency. The term *'within the same type'* has been deleted from the definition, as within the scope of cabin crew operation and training the notion of *the same type* does not exist; the scope only recognises a type or a variant.

comment *68* comment by: *DGAC FRANCE*

CS-CC-105 Definitions

Comment:

Only the initial part of the training is approved by the competent authority. It is not the case for the refresh / recurrent training. Also, a training organisation only provides for initial training.

Add "initial" between "provide" and "training" approval is only required for initial training.

(e) *Training provider* means an operator or training organisation approved by the competent authority to provide **initial** training courses for cabin crew.

response *Not accepted*

NOT ACCEPTED

Both EU-OPS and Opinion 4/2011 Air Operations require all cabin crew training to be approved by the competent authority. The Cabin crew attestation (CCA) is recognised across the EU. When a Member State decides that an operator may issue CCAs, the operator may apply for additional privilege(s) within its AOC (ORO.AOC.120); these privileges are related to providing initial training required by Part-CC and to issuing the CCAs (the same principle as in OPS

1.1005(b) and (c)).

B. DRAFT DECISION - SUBPART B p. 11-12

comment

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

As the text in CS-CC-205 (a)(4) stipulates that "normal and emergency operations" are specified in Appendix 1 to CS-CC-200 (b)(1) a text on this in the Appendix 1 should consequently be included regarding "normal and emergency operations", even though the subject is covered by e.g. ORO.CC.125 (d) (3) (iii) concerning aircraft type specific training and operator conversion training.

CS-CC-205 Determination elements

(a) At least the following type specific elements, as specified in Appendix 1 to CS-CC-200(b)(1) are assessed to determine whether a candidate aircraft is a new type or a variant of the base aircraft:

(1) aircraft configuration;

(2) doors and exits;

(3) aircraft systems; and

(4) normal and emergency operations.

response

Accepted

ACCEPTED

The element "normal and emergency operations" is included in Appendix 1 to CS CCD.200(b)(1).

The element "normal and emergency operations" under CS-CCD requires the applicant to assess any design related element(s) that could impact on normal operations and/or emergency operations. Please refer to GM1 CCD.205(b)(4).

The ORO.CC.125(d)(3)(iii), however, requires the operator to:

(3) cover at least the following operator specific training elements as relevant to the aircraft type to be operated:

(i) ...

(iii) all normal and emergency procedures; ....

comment

17 comment by: *UK CAA*

Page No: 12 – Subpart B

Paragraph No: CS-CC-205 (b) (4)

Comment: This section refers to assessment of items to determine similarity and includes a comparison of Normal and Emergency Operations.

Justification: The Aircraft Difference Table (ADT) only includes Aircraft Configuration, Doors and Exits and Aircraft Systems and does not include Normal and Emergency Operations.

Proposed Text: Further develop the ADT to include Normal and Emergency Operations to provide guidance to ensure standardisation between applicants.

response *Accepted*

ACCEPTED

Included in Appendix 1 to CS CCD.200(b)(1).

comment *32* comment by: *Bombardier Aerospace*

CS-CC-200 (b)(1): While the text does allow for the applicant to provide data in any format, it preferentially refers to a specific format in the aircraft difference table of Appendix 1. In the interest of creating a performance-based requirement rather than a prescriptive one, it would be more appropriate to reference the necessary comparison criteria in CS-CC-200 and to supply the suggested form for the Aircraft Difference Table in an AMC.

response *Not accepted*

NOT ACCEPTED

The proposal was discussed with the NPA 2011-10 review group and it was not accepted by the review group. CS CCD.200(b) provides flexibility to use the ADT form provided in Appendix 1 to CS CCD.200(b)(1) or the applicant's own form provided that it contains the applicable elements and it is acceptable to the Agency.

comment *33* comment by: *Bombardier Aerospace*

CS-CC-210(b): Requiring a new type classification if the type specific elements are "neither identical nor similar to the base aircraft" is problematically vague. There certainly must be some flexibility in the determination of aircraft type as is indicated in this wording, but with no definition of "similar", this requirement is too open to interpretation.

response *Accepted*

ACCEPTED

As it is practically impossible to define "similar" for the purpose and scope of the CS-CCD, the approach of "determining similarity of elements" has been replaced with "identifying differences", hence the term "similar" is not used throughout the CS-CCD text any longer.

comment *39* comment by: *AIRBUS*

CS-CC-200 Determination process:

At the aircraft level, and taking into considerations that OSD are linked to TC and NOT to individual aircraft configuration, the words "at least" should be deleted and sentence (a) should read:

"(a) identifies differences by comparing the type specific elements specified in

CS-CC-205; and"

Moreover, under CS-CC-200 (b) the Agency mandates the way to proceed; Airbus would recommend adjusting the wording so that the methodology be followed but the form from Appendix 1 be considered as a template only that may be adjusted by the applicant based upon the need and practices.

Proposal for (b):

"(b) records the analysis of differences into an aircraft difference table which can be either

1. the form specified in Appendix 1 to CS-CC-200(b)(1); or
2. the applicant's form, provided it contains at least all applicable elements specified in the CS-CC-205."

response *Partially accepted*

Comment #01 *"At the aircraft level, and taking into…"*

ACCEPTED

CS CCD.200 Determination process: the word "at least" has been deleted.

Comment #02 *"Moreover, under CS-CC-200 (b)…"*

NOT ACCEPTED

CS CCD.200(b): Commentator's proposal to replace "…specified in *aircraft difference table*" with "…specified in *CS CC.205*" would result in exclusion of a number of elements from the ADT. These elements complement the main headings outlined in CS CCD.205 and are to be assessed, as applicable to the candidate aircraft, during the determination process.

comment *40* comment by: *AIRBUS*

CS-CC-205 Determination elements:

In the current proposal, the Agency goes beyond the requirement of EU-OPS that have always been considered by TC Holders, for conducting the "type assessment".

OPS 1.1030 (b) states:

"(b) For the purposes of subparagraph (a), variants of an aeroplane type are considered to be different types if they are not similar in all the following aspects:

1. emergency exit operation;

2. location and type of portable safety equipment; and

3. type specific emergency procedures."

This is complemented by the current applicable ACJ:

"ACJ OPS 1.1030 Operation on more than one type or variant

See JAR-OPS 1.1030

1 For the purposes of JAR-OPS 1.1030(b)(1), when determining similarity of exit operation the following factors should be assessed to justify the finding of similarity:

a. Exit arming/disarming;

b. Direction of movement of the operating handle;

c. Direction of exit opening;

d. Power assist mechanisms;

e. Assist means, e.g. evacuation slides.

Self-help exits, for example Type III and Type IV exits, need not be included in this assessment."

Then, under § 25 of the explanatory note the Agency tentatively explains the rationale behind the addition of new elements to take into consideration during the assessment and refers to the RIA.

In the RIA we find the description of 2 options, and the agency preferred one:

The Agency explains in the explanatory note under § 24 that basis of CS-CC-205 (b)(2) assessment of similarities of doors is related to ACJ OPS 1.1005/1.1010/1.1015/1.1020. However the title of this ACJ is "Representative Training Devices", and does not correspond in any manner to the proposed text.

"Option 2: determination of a new type based on the assessment of doors and exits and aircraft configuration only would result in cases where two aircraft being identical or similar in these two elements, could be automatically determined as belonging to the group of the same type. Other existing differences relevant to cabin crew operation in e.g. fire prevention system, smoke detection system, communication system, crew control panels would not be considered and the fundamental differences in systems between both aircraft would be overlooked. This option implies a negative safety impact as there would be a number of aircraft subgroups within one type family considered to be the same type, having differently functioning aircraft systems. This would result in operators establishing series of different/modified/amended procedures applicable to aircraft subgroups within the same type. Taking into account three or four types cabin crew can operate on, the outcome would represent an excessive number of differences and procedures, with the associated risk of confused knowledge, easy mistakes-making or conducting incorrect safety actions related to any of the systems.

Option 3: determination of a new type based on the assessment of doors and exits, aircraft configuration, aircraft systems and normal and emergency operations would lead to an evaluation of all relevant elements and their combined impact, therefore preventing significant differences to be overlooked or considered irrelevant. It may limit the number of aircraft determined to belong to the group of the same type for cabin crew operation. The knowledge and awareness of an individual qualified on groups of aircraft would be maintained at a high level, as the focus would be concentrated on a limited number of varieties and modifications. This would preclude incorrect safety related actions arising from confusions resulting from an excessive number of differences. A positive safety impact can be expected.

With regard to the determination of a new type or variant, Option 3 has been chosen. The assessment of similarity of all elements aircraft configuration, doors and exits, aircraft systems, normal and emergency operation is to be taken into account. It is to eliminate the risk of errors, disorientation and mistaken performance resulting from a high number of differences that can have a considerable impact on safety. A low negative economic impact has been identified for this option, but the Agency considers that this is outweighed by the expected safety benefits and improved harmonisation across the EU;"

While Airbus has a lot of liking for the developed rationale associated with Option 3, Airbus would like to stress that this approach should be dealt with at operator level with its NAA, as per current EU-OPS rule, and not at TC Holder

	level. It is not in line with the notion of "Type Specific" related to the Type Certification configuration, as most of the listed elements under aircraft systems and operations will most probably be linked to the individual aircraft configuration. Airbus consequently suggests the Agency to reword the CS-CC-205 in a different manner to be more in line with the current EU-OPS practices, and to implement the relevant provisions in Air Operations rules related to elements not covered by Option 2 and included in Option 3.
response	*Not accepted* Comment #01: *"CS-CC-205 Determination elements: In the current proposal..."* NOT ACCEPTED The EU-OPS requirement referenced by the commentator addresses the operator and the operator's individually configured aircraft. The determination elements referenced in the NPA 2011-10 are the ones that have been historically used in the JOEB/EASA OEB CC process and address the *type specific* determination of an aircraft at the level of the applicant and the Agency. Comment #02: *"Then, under § 25 of the explanatory note..."* NOTED The entered reference was meant to provide information on the basis on which the elements have been considered, extracted and included. The same elements are referenced in ACJ OPS 1.1030(1). Comment #03: *"While Airbus has a lot of liking for the developed rationale..."* NOT ACCEPTED The determination elements referenced in the NPA 2011-10 are the ones that have been historically used in the JOEB/EASA OEB CC process and address the *type specific* determination of an aircraft at the level of the applicant and the Agency. At the operations level, as per ORO.CC.250 (individual aircraft configured by the customer – operator), each aircraft shall be determined to be a type or a variant for cabin crew qualification. Comment #04: *"It is not in line with the notion of "Type Specific" related to..."* NOT ACCEPTED The elements under aircraft systems were extensively discussed within the rulemaking subgroup 21.039(f) with an active participation of manufacturers on the subject, and the rulemaking subgroup agreed on the elements included in the NPA 2011-10 as *type specific*, which cannot be changed (configured) on request of any customer (operator). Aligning CS CCD.205 with EU-OPS, as intended by the commentator, would require a lot more information to be developed and provided by the applicant (manufacturer/design organisation), e.g. location and type of portable safety equipment, type specific emergency procedures.

comment 41 comment by: AIRBUS

CS-CC -210 Determination of new type:

In line with previous comment, this paragraph should be amended and sub-§ (c) should be deleted. This sub-§ (c) is however relevant at operator level, but not at TC Holder level.

response *Not accepted*

NOT ACCEPTED

The decision of the Agency that the determination process is based on 4 determination elements was presented to the rulemaking group 21.039 in December 2010 and as such it was also presented to the rulemaking subgroup 21.039(f) in February 2011.

comment 42 comment by: AIRBUS

CS-CC-215 Determination of a variant:

Sub-§ (a) is obvious and Airbus has no comment to provide.

Sub-§ (b) could be deleted as a variant is the result of the assessment described in CS-CC- 210, which could potentially be renamed determination of type or variant.

Sub-§ (c): As the differences are already part of the assessment described above and the differences already identified, this sub-§ should be included into CS-CC-210.

Overall CS-CC-210 should read:

"CS-CC -210 Determination of new type or variant

(a) The candidate aircraft is determined a new type:

(1) if so documented in the application and demonstrated to the Agency; or

(2) as a result of the determination process required by CS-CC-200.

(b) For the purpose of (a)(2), the candidate aircraft is determined a new type if one or more of the type specific elements of CS-CC-205(b)(1) and (b)(2) are neither identical nor similar to the base aircraft.

Self-help exits alone, for example Type III and Type IV exits, need not be a factor to determine candidate aircraft as a new type.

(c) The differences and their assessed impact compiled in the aircraft difference table in accordance with CS-CC-200 support the development of the differences training by training provider(s)."

response *Not accepted*

NOT ACCEPTED

The Agency believes that the text as presented now provides clarity.

comment 43 comment by: AIRBUS

Appendix 1 to CS-CC-200(b)(1):

This appendix should not be part of CS Book 1 but should be subject to a GM into CS Book 2, as part of the elements listed are beyond the scope of the "type specific elements" for type assessment linked to TC configuration (see other comments). The guidance is valuable and could be kept in a GM would a TC Holder elect voluntarily to make a more complete difference analysis. However, it would definitely need to be implemented in the Air Operations rule for the operator determination of types or variants within its fleet.

response *Partially accepted*

PARTIALLY ACCEPTED

The elements listed in the Appendix 1 to CS CCD.200(b)(1) were extensively discussed within the rulemaking subgroup 21.039(f) with an active participation of manufacturers on the subject. The elements were agreed on by the rulemaking subgroup as *type specific* which cannot be changed (configured) on request of any customer (operator). The elements contained in the ADT are to be assessed, as applicable to the candidate aircraft, during the determination process; they are not subject to a voluntary assessment by the applicant.

Should a TC holder elect to conduct a more detailed analysis, CS CCD.200(b)(2) provides the applicant with the flexibility to use its own standard form.

Taking into account the comments of UK CAA and AEA, referring to the extensive content of the Appendix 1 to CS CCD.200(b)(1), the content of the ADT has been revised.

The proposal of the commentator to include a similar table in the operational requirements has been carefully considered with the NPA 2011-10 review group and the group did not recommend the inclusion at this stage.

comment *49* comment by: *SAS*

Airlines that have existed for many years have often fleets consisting of many types and variants. If new requirements are introduced as proposed in Subpart B "Determination of a new type and a variant" it will strike specifically against mentioned category of airlines as the number of types that cabin crew could serve on is limited. Added requirements will result in more types which in turn will result in a need to hire more cabin crew.

As experienced cabin crew do not consider that for example the number of doors should be a crucial factor in determining a new type it is suggested that the text in CS-CC210 (b) is rewritten to:

Consideration must be given to the specific elements of CS-CC-205 (b)(1) and (b)(2) when determining if a candidate aircraft is a new type.

response *Partially accepted*

PARTIALLY ACCEPTED

The decision of the Agency that determination process is based on 4 determination elements was presented to the rulemaking group 21.039 in December 2010 and as such it was also presented to the rulemaking subgroup 21.039(f) in February 2011.

The paragraph CS CCD.210(b) and the wording "..*one or more of the type specific elements are neither identical nor similar*…" have been revised and modified.

comment	*69* comment by: *DGAC FRANCE* **CS-CC-200 Determination process** **Comment:** When reading CS-CC-200 requirement, paragraph (b) (2), it seems to DGAC France that any format is acceptable provided it is equivalents in contents. But the note within the NPA on page 7 seems to refer to an EASA decision to accept other formats: "The ADT may be substituted by the Applicant's form if it is acceptable to the Agency." Is the CS-CC-200 in line with the intent of EASA in this note? **Maybe "if it is acceptable to the Agency" should be added to this requirement.**
response	*Accepted* ACCEPTED Included in CS CCD.200(b)(2).

comment	*70* comment by: *DGAC FRANCE* **CS-CC-205** **Determination elements** **Comment:** CS-CC-205 (b) (1) (ii) use the criteria of "decks" to assess variant and types. It seems that a definition should be added to clarify its meaning and help evaluating what is a deck or not for the purpose of cabin crew training. As an example of questions that may be raised, is a "passenger lavatory and crew rest deck" inside the cargo zone of an aircraft considered as a deck? We recommend **adding a definition** within **CS-CC-105 Definitions** such as: Deck: a floor where sits are available for passengers and usable for take-off and landing.
response	*Accepted* ACCEPTED A new definition of *'passenger deck'* has been developed for the purpose of CS-CCD; please refer to *CS CCD.105(e).*

comment	*71* comment by: *DGAC FRANCE* **CS-CC-205** **Determination elements** **comment:** CS-CC-205 (b) (1) (iii) speaks of "business/private" aircraft. It is recommended to delete those terms here, as it does not add much precision compared to "(iii)

customised configuration for rotorcraft or aircraft cabin, as applicable"

Indeed, CS-CC-100 identifies the applicability to "more than 19 pax" aircraft and on a voluntary basis below 19 pax. We may have "business/private" aircraft in both cases.

If we keep the "business/private" words in the 205 (b) requirement, we could have the impression that any business/private" cabin particularities must be described here.

response *Noted*

NOTED

CS CCD.205(b)(1)(iii) has been deleted in its entirety based on discussions within the NPA 2011-10 review group.

comment *72* comment by: *DGAC FRANCE*

CS-CC-210 Determination of a new type

Comment:

The CS-CC210 (b) shall not only consider the identified differences, but also consider the impact assessment of those differences. Otherwise, we believe the system might be too rigid.

First example: Number of doors

A straight version may have an additional pair of door on the same aircraft type. Although there is a difference in number of doors, this difference should not systematically conduct to a new type determination. It must be assessed on a case-by-case basis.

Second example: An airline may use (lease contract) an aircraft equipped with slide raft. Maybe the rest of the fleet of similar aircraft that airline operates is equipped with slides. The difference in equipment does not have an impact on the airline operations and therefore the crew shall not need any specific training. Again, it is useful to assess the impact of identified differences.

It is therefore recommended to modify **CS-CC-210 (b):**

(b) For the purpose of (a)(2), the candidate aircraft is determined a new type if one or more of the type specific elements of CS-CC-205(b)(1) and (b)(2) are neither identical nor similar to the base aircraft **and have a significant impact on operations and procedures comparing to the base aircraft.**

response *Partially accepted*

Comment #01: *"The CS-CC210 (b) shall not only consider..."*

NOTED

The evaluation criteria currently used in EASA OEB CC process were opposed by the manufacturers during the NPA 2011-10 drafting process. The assessment criteria for the evaluation of the identified differences and their impact are yet to be developed by the Agency based on the final outcome of CS-CCD. Once developed, the criteria will be available on the Agency's website.

Comment #02: "*First example: Number of doors..."*

PARTIALLY ACCEPTED

CS CCD.210 has been revised and modified.

Comment #03: *"Second example:..."*

NOT ACCEPTED

Example provided by the commentator refers to the operations level; such differences are to be assessed by the operator in accordance with ORO.CC.250. This is not within the scope of CS-CCD.

B. DRAFT DECISION - Appendix 1 to CS-CC-200(b)(1) Aircraft difference table p. 13-19

comment

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

See comment on CS-CC-205 (a) (4). A text on normal and emergency operations seems to be missing and should be added for consistency with CS-CC-200 (a) (4).

response

Accepted

ACCEPTED

The element "normal and emergency operations" is included in Appendix 1 to CS CCD.200(b)(1).

comment

18 comment by: *UK CAA*

Page No: 13 – Aircraft Difference Table

Paragraph No: Appendix 1 to CS-CC-200 (b) (1)

Comment: The table is very detailed and contains a number of areas where there appears to be repetition of information and other information which does not appear to be have safety relevance.

Justification: Examples include –

- Features and controls for exits are likely to be included in the operation items such as opening, arming etc.
- Slide arming is likely to be the same as door arming.
- Drop down oxygen should also refer to the type of system, i.e. gaseous or chemical.
- Relevance of pa broadcast to whole cabin?

Proposed Text: Review the content and simplify to facilitate ease of use. The table should correlate to the main text in the CS and also to that in ORO.CC 125 and AMC1-OR.OPS.CC 125.

response

Partially accepted

PARTIALLY ACCEPTED

The content of the Appendix 1 to CS CCD.200(b)(1) has been revised; the

examples referenced in this comment have been addressed as follows:

Features and controls: maintained, examples added in brackets.

Slide/door arm/disarm - the two actions are interlinked:

- Slide arm/disarm: rephrased and maintained.
- Door arm/disarm: maintained.

Drop down oxygen system (gaseous/chemical): added.

PA broadcast to the entire cabin compartment: deleted.

The aircraft difference table is to be used by the applicant and the Agency during the determination process. The document reflects the type specific elements which cannot be changed (configured) on request of any customer (operator) and which are to be assessed by the applicant, as applicable to the candidate aircraft, during the determination process. ORO.CC.125 and its associated AMC reflect training subjects.

B. DRAFT DECISION - SUBPART C p. 20

comment *6* comment by: *NCCU*

Re. Subpart C "Type Specific Data for Cabin Crew Training"

The NPA states type specific data for cabin crew training while other documents endorse the minimum syllabus of pilot type rating training, including determination of type rating and the core aircraft reference data to support the qualification of associated simulators and the minimum syllabus of maintenance certifying staff type rating training including determination of type rating.

This illustrates a watering down of cabin crew training that NCCU find unacceptable. The result is unfair treatment of cabin crew and thus cabin safety standards in Europe. The result could in the end be that Europe ends up with harmonized type rating training for pilots and maintenance but not for cabin crew. In fact this could leave variations not only with the National Aviation Authority but also variations from operator to operator. This is completely unacceptable as the wording "type specific data" does not cover any training.

Syllabi left at the discretion of the operator will not achieve harmonization as aimed by EASA; reductions to the originaldraft proposal should be avoided not to undermine the aim of the OSD concept.

Re. CS-CC-310 Type Spesific Data Content

In an article in AirlineSafety it is recommended that cabin crew achieve knowledge of basic aerodynamics principles and thus be able to identify major parts of the aircraft. The authors recommend that cabin crew have knowledge of wing components, such as flaps, slats, slots, spoilers and ailerons as well as the vertical and horizontal stabilizers. Due the security the pilots may not be able to leave the cockpit to verify the situation (AirlineSafety.com).

This may also be relevant regarding other parts and systems of the aircraft.

response *Noted*

NOTED

The Terms of Reference for the Rulemaking task 21.039 indeed reflected

minimum syllabus of cabin crew type rating training. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

comment

19 comment by: *UK CAA*

Page No: 20 - Subpart C

Paragraph No: CS-CC-300

Comment: There does not appear to be any requirement for the applicant to include information about the results of the CS 25.803 evacuation demonstration or analysis which may have identified particular evacuation characteristics including exit overloads, exit by-pass, crowd control etc.

Justification: Aircraft evacuation demonstrations or analysis as required by CS 25.803 often identify specific issues that operators and cabin crew should be aware of.

Proposed Text: Add "(3) All necessary data obtained during the evacuation demonstration or analysis including specific aircraft door/exit characteristics, passenger movement during the evacuation including exit overload, dried up exits and subsequent redirection, exit by-pass procedures and general crowd control."

response

Accepted

ACCEPTED

The newly created Subpart D has been dedicated to Cabin Aspects of Special Emphasis (CASE). The information referenced in this comment is included in the new concept CASE.

comment

20 comment by: *UK CAA*

Page No: 20 – Subpart C

Paragraph No: CS-CC-310

Comment: The Type Specific Data content is comprehensive and very detailed and contains similar information to that contained in AMC1-OR.OPS.CC.125 (b) Aircraft Type Specific training. However it contains a number of items that are not included in the AMC and omits some items that are in the AMC. The format/grouping differs also.

Justification: The table should contain at least all items the in the AMC and preferably in the same subject groupings.

Proposed Text: Review the contents to align with the AMC.

response

Partially accepted

PARTIALLY ACCEPTED

AMC1-ORO.CC.125(c) and Appendix 1 to CS CCD.310 have been checked; the

omitted element *'un-pressurised areas'* has been included in Appendix 1 to CS CCD.310 *Aircraft description, General(g).*

CS-CCD addresses manufacturers and design organisations, information in the Appendix 1 to CS CCD.310 is following a subject structure and does not need to reflect the structure of the operational requirements.

comment *25* comment by: *UNSA-SMAF*

Re. Subpart C "Type Specific Data for Cabin Crew Training"

The NPA states type specific data for cabin crew training while other documents endorse the minimum syllabus of pilot type rating training, including determination of type rating and the core aircraft reference data to support the qualification of associated simulators and the minimum syllabus of maintenance certifying staff type rating training including determination of type rating.

This illustrates a watering down of cabin crew training that UNSA find unacceptable. The result is unfair treatment of cabin crew and thus cabin safety standards in Europe. The result could in the end be that Europe ends up with harmonized type rating training for pilots and maintenance but not for cabin crew. In fact this could leave variations not only with the National Aviation Authority but also variations from operator to operator. This is completely unacceptable as the wording "type specific data" does not cover any training.

Syllabi left at the discretion of the operator will not achieve harmonization as aimed by EASA; reductions to the originaldraft proposal should be avoided not to undermine the aim of the OSD concept.

Re. CS-CC-310 Type Spesific Data Content

In an article in AirlineSafety it is recommended that cabin crew achieve knowledge of basic aerodynamics principles and thus be able to identify major parts of the aircraft. The authors recommend that cabin crew have knowledge of wing components, such as flaps, slats, slots, spoilers and ailerons as well as the vertical and horizontal stabilizers. Due the security the pilots may not be able to leave the cockpit to verify the situation (AirlineSafety.com).

This may also be relevant regarding other parts and systems of the aircraft.

response *Noted*

NOTED

The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

comment *34* comment by: *Bombardier Aerospace*

CS-CC-305(b): While there is no doubt that the voluntary provision of supplementary non-mandatory data can be of value to the operator, we see no

benefit in creating a standard for it.

At most there should a standard defining the quality of voluntary, non-mandatory data provided to the operator. We suggest deleting this paragraph and its associated GM.

response *Not accepted*

NOT ACCEPTED

All data resulting from OSD/CS-CCD is subject to the approval by the Agency. The applicant bears the responsibility of providing correct and quality data about its product.

comment *35* comment by: *Bombardier Aerospace*

CS-CC-305(a): The responsibility for determining mandatory supplementary data should not lie with the applicant, but with the Agency or its delegates. Specific criteria should be defined to make this determination uncontentious. If the data is not mandatory, it should not be subject to standards. Again, there is no question that there is considerable value in supplementary data. Our position is only that if the Agency is not approving the data it should not be regulating it.

response *Not accepted*

NOT ACCEPTED

All data resulting from OSD/CS-CCD is subject to the approval by the Agency. Please refer to the newly created *CS CCD.110 OSD box concept - status of provided data* which reflects the classification of paragraphs in the OSD box concept.

comment *44* comment by: *AIRBUS*

CS-CC-305 Voluntary provision of supplementary data:

Text from Sub-§ (a) should be amended as the list does not correspond to type specific elements as they relate to cabin configuration as elected by the operator.

Sub-§ (a) should therefore read:

> "(a) data to be used as the mandatory basis by training provider(s), such as: [...]"

response *Accepted*

ACCEPTED

'Type specific' deleted from the introductory text in CS CCD.305(a).

comment *55* comment by: *Dassault Aviation*

CS-CC-310

This paragraph currently refers to Appendix 1, which would lead to include the complete description in the OSD. This paragraph should refer to TASE-CC, similarly to what is done in the CS FC. The OSD CC should include these TASE for CC.

response *Partially accepted*

PARTIALLY ACCEPTED

The concept TASE, as used in CS-FCD, deals with type specific training requirements; therefore, it could not be applied to CS-CCD, which deals with provision of data by the applicant. However, the idea of a similar concept was supported by all group members and the concept was titled Cabin aspects of special emphasis (CASE). The group agreed that the concept would include any information that end users and cabin crew should be aware of, such as information identified during emergency evacuation demonstration required by CS 25.803 or any other unique elements identified during the certification process. The newly created Subpart D has been dedicated to CASE.

comment *59* comment by: *SCCA/ head of health and safety*

Subpart C "Type Specific Data for Cabin Crew Training"

The NPA states type specific data for cabin crew training while other documents endorse the minimum syllabus of pilot type rating training, including determination of type rating and the core aircraft reference data to support the qualification of associated simulators and the minimum syllabus of maintenance certifying staff type rating training including determination of type rating.

This illustrates a watering down of cabin crew training. The result is unfair treatment of cabin crew and thus cabin safety standards in Europe. The result could in the end be that Europe ends up with harmonized type rating training for pilots and maintenance but not for cabin crew. **This is unacceptable as the wording "type specific data" does not cover any training.**

CS-CC-310 Type Spesific Data Content

In an article in AirlineSafety it is recommended that cabin crew achieve knowledge of basic aerodynamics principles and thus be able to identify major parts of the aircraft. The authors recommend that cabin crew have knowledge of wing components, such as flaps, slats, slots, spoilers and ailerons as well as the vertical and horizontal stabilizers. Due the security the pilots may not be able to leave the cockpit to verify the situation (AirlineSafety.com).

This may also be relevant regarding other parts and systems of the aircraft.

response *Noted*

NOTED

The Terms of Reference for the Rulemaking task 21.039 indeed reflected *minimum syllabus of cabin crew type rating training*. In the course of drafting the NPA 2009-01, due to the lack of direct reference to minimum syllabus for cabin crew type rating training in the Basic Regulation with regard to the OSD, the rulemaking group 21.039 agreed to require the provision of *'type specific **data**'* and *'determination of a new type or variant'* for cabin crew as reflected in the Opinion 07/2011, thus in accordance with the objective of Article 5(5)(e)(vi) of the Basic Regulation.

comment 73 comment by: *DGAC FRANCE*

CS-CC-305

Within the list of items in the five bullets (a) (1) to (5), we believe the restriction "**when supplied by the applicant**" is a valid restriction for any of those items and **shall be added in each of those paragraphs**

response *Accepted*

ACCEPTED

The proposed text has been included in the introductory sentence of CS CCD.305(a).

B. DRAFT DECISION - Appendix 1 to CS-CC-310 p. 21-25

comment 27 comment by: *Luftfahrt-Bundesamt*

Appendix 1 to CS-CC-310 General (j)

Appendix 1 to CS-CC-310 General (j) should be amended to include the term cabin crew positioning, i.e. "number and composition of flight crew and number, composition **and positioning** of cabin crew identified by the evacuation demonstration or analysis".

This aspect is particularly important for cabin layouts / seating configurations differing from the passenger seating capacity indicated in the TCDS, e.g. if more than 50 passenger seats are removed and as a result the aircraft may possibly be operated with less than the maximum required number of cabin crew members identified during the evacuation demonstration or analysis.

response *Partially accepted*

PARTIALLY ACCEPTED

Paragraph (j) has been modified as follows:

- "composition of flight crew" has been deleted, as this information is included in AFM;
- "number and location of cabin crew stations (required and additional) has been included in (j);
- "seating location of cabin crew members" has been included in the newly created *Subpart D Cabin aspects of special emphasis*.

comment 30 comment by: *LUBA F.*

Appendix 1 to CS-CC-310: element for <cabin compartment> training infos

(handling of non-conformities)

Besides training cabin staff on function of (properly working) systems / elements it seems advisible to brief / instruct cabin crew on the common failure / modes of system and associated implications as these may not always be

properly known. Three generic samples following:

Spring failure on cabin attendent upward folding seat in galley with (emergency) door access requirement, therefore: MEL requirement for seat to be stowed fixed in upright position to avoid egress route blocking in emergency, therefore: basic knowledge for handling / reporting required by cabin staff

Emergency door lights and / or floor path marking light may pose problem for MEL ATA 33 dispatch criteria allowance and can easily be no go (cabin crew awareness sometimes doubtful).

Waste bin flapper door not closing / springloaded closed (to contain extinguishing agent) is MEL-C dispatch item, but basic understanding / awareness needs to be raised for crew handling.

response *Partially accepted*

PARTIALLY ACCEPTED

"Operation of waste bin flap" has been included in Appendix 1 to CS CCD.310 *Cabin compartment (e)(9).*

The other elements referenced in this comment fall under the operator's responsibility.

comment *31* comment by: *LUBA F.*

Attachment #2

Appendix 1 to CS-CC-310: Type specific data content-Aircraft description-General

Passenger Safety Briefing Cards

As it is understood that the TC /STC holder needs to develop basic information for training (within OSD process) it would seem sensible to require the holder to develop a minimum basic <passenger safety istruction card> content to be supplied to the customer and could potentially enhanced by the latter.

Airplane Rescue and Fire Fighting (ARFF) card info

Similarly it could be seen as worthwhile to require the TC holder to develop appropriate standard publication (ARFF cards-information) to become part of OSD data, if not yet the case. Although this information is known to exist with several TC holders, there seems to be no formal element/standard or location for publication of this info.

Boeing ARFF attached as sample

response *Noted*

NOTED

The development of passenger safety briefing cards and ARFF cards referenced in this comment are currently not mandated by certification requirements.

comment *45* comment by: *AIRBUS*

CS-CC-310 Type Specific data content & Appendix 1:

Appendix 1 is a very good checklist and should be used as such, as many of the elements identified might not always be applicable.

Airbus is concerned on how this appendix will be used during the "approval process" as the approval process is unknown, and would recommend considering transferring it into AMC/GM material into Book 2.

response

Not accepted

Comment #01: "*Appendix 1 is a very good checklist and...*"

NOT ACCEPTED

The applicant will only provide information from Appendix 1 to CS CCD.310 that is relevant (applicable) to the candidate aircraft, as it is stated in the introductory sentence to this Appendix.

Comment #02: *"Airbus is concerned on how this appendix will be used..."*

NOT ACCEPTED

The Appendix 1 to CS CCD.310 contains elements the applicant is required to provide as applicable to the candidate aircraft.

The current EASA OEB CC evaluation criteria have been opposed by the manufacturers during the NPA 2011-10 drafting process. As a result, EASA will need to develop the evaluation/approval process based on the final outcome of the CS-CCD. The evaluation criteria will be available on the Agency's website.

comment *74* comment by: *DGAC FRANCE*

Appendix 1 to CS-CC310, § aircraft description / general, bullet (i):

The passenger capacity to be taken into account should be the "**maximum certified**" capacity.

Modify bullet (i) accordingly.

response

Partially accepted

PARTIALLY ACCEPTED

The newly created term "passenger seating capacity" is used for the purpose of CS-CCD. Please, refer to *CS CCD.105(f).*

comment *75* comment by: *DGAC FRANCE*

Appendix 1 to CS-CC310, § aircraft description / general, bullet (j):

As the end of the sentence "identified by the evacuation demonstration analysis" can only help in determining cabin crew composition, it is recommended to modify (j) for clarity as follows:

"(j) number and composition of flight crew, number and composition of cabin crew identified by the evacuation demonstration or analysis."

response

Partially accepted

PARTIALLY ACCEPTED

Paragraph (j) has been modified as follows:

- "composition of flight crew" has been deleted, as this information is included in AFM;
- "number and location of cabin crew stations (required and additional) has been included in (j);
- "seating location of cabin crew members" has been included in the newly created *Subpart D Cabin aspects of special emphasis*.

comment *76* comment by: *DGAC FRANCE*

Appendix 1 to CS-CC310, § aircraft description / flight crew compartment, bullet (b):

Only the pilot seats should be considered and not any other ones. Therefore adds the word "**pilot**" as follows "…. installed **pilot** seat type…."

response *Not accepted*

NOT ACCEPTED

CS-CCD deals with provision of comprehensive data about the aircraft by the applicant to end users. The end user has the responsibility to communicate the relevant information to cabin crew. Cabin crew may be required to operate/use/give instructions on the use of additional seats in the flight crew compartment.

comment *77* comment by: *DGAC FRANCE*

Appendix 1 to CS-CC310, § aircraft description / cabin compartment, bullet (a) (1):

Among installed crew seats, some seats are required to be used during some phase of flights (take off / landing). Others are "extra" or "additional" seats. This particularity should be identified in the CS, so the crew will be trained to that specificity.

Please note that the definition of "required cabin crew seats" is already in CS-MMEL.

response *Accepted*

ACCEPTED

Appendix 1 to CS CCD.310 Aircraft description, General (j) has been modified as follows:

- "number and location of cabin crew stations (required and additional) has been included in (j);
- "seating location of cabin crew members" has been included in the newly created *Subpart D Cabin aspects of special emphasis*.

comment	*78* comment by: *DGAC FRANCE* **Appendix 1 to CS-CC310, § aircraft description / aircraft systems:** As an example, there is no need to put details such as bullet (f) (8) or (l) items. The general description of the paragraph should be enough for CC knowledge. Please consider an additional review of that long list to make sure that such items are of necessary importance for CC to know.
response	*Not accepted* NOT ACCEPTED CS-CCD deals with provision of comprehensive data about the aircraft by the applicant to end users. The end user has the responsibility to communicate the relevant information to cabin crew.

B. DRAFT DECISION - Book 2 p. 26-28

comment	*46* comment by: *AIRBUS* GM1 to Appendix 1 to CS-CC-200(b)(1): This GM should be amended together with the CS-CC-200 and 205 (See comments on Book 1). A TC Holder can assess whether there is a difference between aircraft design, so the Columns no impact, impact on operation are valid. However a TC Holder is not a training organisation nor an operator, and consequently impact on procedures and impact on training are elements that should be dealt with by the operator on the basis of the difference described by the TC Holder, but not by the TC Holder. An operator may want to adjust its procedures so that they are common for 2 aircraft, even if there are technical differences in the design. Consequently, Airbus requests the revision of this GM to align it with the TC Holder duties (identification of type specific differences and differences in operations of type specific elements like doors). Airbus also recommends that such template with the additional elements related to impact on procedure and training be implemented in the relevant Air Operations rules, as this kind of template will guide an operator to assess the differences within its fleet.
response	*Partially accepted* PARTIALLY ACCEPTED The elements listed in the Appendix 1 to CS CCD.200(b)(1) have been extensively discussed within the rulemaking subgroup 21.039(f) with an active participation of manufacturers. The elements were agreed on by the rulemaking subgroup as *type specific* which cannot be changed (configured) on request of any customer (operator). The elements contained in the ADT are to be assessed, as relevant to the candidate aircraft, during the determination process; they are not subject to a voluntary assessment by the applicant. Should a TC holder elect to conduct a more detailed analysis, CS CCD.200(b)(2) provides the applicant with the flexibility to use its own standard form. Based on the outcome of the NPA 2011-10 review group, the status of

4-columns in ADT within the CS-CCD has been modified, please refer to GM1, GM2 and GM3 to Appendix 1 to CS CCD.200(b)(1). The recommendation of the commentator to include a modified version of the ADT in the operational requirements has been discussed with the review group and the group did not recommend the inclusion at this stage.

comment

47 comment by: *AIRBUS*

Attachment #3

GM1-CS-CC-305(b) Voluntary use of data:

In order to ensure adequate understanding of this guidance it could be wise to use the representation from Part 21 (GM 3 to 21A.15(d) - See Box 1 to 4 concept), so as to best illustrate what are the duties of the TC Holder versus the ones of the end user (Training organisations and operators):

"**GM No. 3 to 21A.15(d) OSD content**

The OSD will typically consist of elements that are required to be included by the TC applicant and elements that can be added at the request of the TC applicant. (see also GM No.4 to 21A.15(d)).

Both the required elements and the additional elements will have a part that is mandatory to be used by the operator or training organisation (status of rule) and a part which is considered recommendation to the operator or training organisation (status of AMC). For illustration of this concept the below figure is included.

Box 1: required from TC holder; mandatory for end-users

Box 2: required from TC holder; recommendation to end-users

Box 3: at request of TC holder; mandatory for end-users

Box 4: at request of TC holder; recommendation to end-users

The exact content of the four boxes in the above figure is determined by the certification specification that is applicable to the specific element.

The status the data will have on the side of the operator or training organisation should be indicated in the OSD by segregating the data in a section called "Mandatory" and a section called "Recommendations".

Refer to attached document.

response

Accepted

ACCEPTED

The classification of paragraphs in the OSD box concept is reflected in the newly created *CS CCD.110 OSD box concept - status of provided data* and its associated *Appendix 1 to CS CCD.110 OSD box concept - status of provided data.*

comment

48 comment by: *AIRBUS*

GM1 to Appendix 1 to CS-CC-310 Type specific data:

The current text states:

"TYPE SPECIFIC DATA

Type specific data required by this Appendix contain detailed technical information useful for cabin crew to obtain general knowledge on the type of aircraft they are to be qualified on. The detailed technical information may not necessarily be examined or checked unless specified by the applicable operational requirements and/or if determined by the training provider(s)."

Airbus understands the intent but would however like to stress that the last part of this paragraph is targeting Operators and Training organisations and consequently should be implemented within the relevant Air Operation rules related to the Cabin Crew type training to adequately explain the link with the OSD data.

If the link with the Air operations rules is not adequately implemented, there will be a mandatory requirement imposed on TC Holders without any link with operators and training organisation and then OSD will be useless.

response *Accepted*

ACCEPTED

The second sentence of the text has been deleted.

Appendix A – Regulatory Impact Assessment p. 29-37

comment *7* comment by: *NCCU*

Re. Type Specific Data for Cabin Crew Training

NCCU supports Option 2: Comprehensive information on all areas related to cabin crew operation in addition to areas described in Option 1 is a prerequisite for a minimum syllabus of training in order to ensure that cabin crew will be sufficiently trained to cope with any emergency situation.

Re. Determination of new type or variant

NCCU supports Option 3 as this would lead to an evaluation of all relevant elements and their combined impact on safety issues.

response *Noted*

NOTED

Thank you for the support.

comment *21* comment by: *UK CAA*

Page No: 31 – Regulatory Impact Assessment

Paragraph No: 1.3

Comment: The text suggests that if the cabin crew are needed to assist the flight crew in a safety related matter, then they need technical information in the Cabin Crew Operations Manual to refer to.

Justification: It is not appropriate for cabin crew to have to look up technical information in a safety situation. If it is necessary for effective communication

in a safety related incident, then this should be information/data that they are required to be familiar with and subject to checking.

Proposed Text: Include only such information that cabin crew are required to know and retain.

response *Not accepted*

NOT ACCEPTED

E.g. main landing gear mechanical system indicator is not referenced as a training requirement for cabin crew qualification; however, this is an item cabin crew can be required by flight crew to check. CS-CCD specifies data the manufacturer makes available to the end user. It is the operator's responsibility to communicate the relevant information to cabin crew and to include the information in the relevant manuals.

comment *22* comment by: *UK CAA*

Page No: 34 – Regulatory Impact Assessment

Paragraph No: Option 2

Comment: The text refers to comprehensive training to ensure competency but also refers to the provision of extra technical information to assist in safety related matters.

Justification: It is not considered appropriate for items such as operation of flight crew oxygen systems to be a reference item. This is essential safety information and is a required training item in ORO.CC.125.

Proposed Text: The document should be checked to ensure that it contains all training items as required by ORO.CC and associated AMC material.

response *Noted*

NOTED

AMC1-ORO.CC.125(c) and Appendix 1 to CS CCD.310 have been checked; the omitted element *'un-pressurised areas'* has been included in Appendix 1 to CS CCD.310 *Aircraft description General(g).*

The referenced *'flight crew oxygen system'* provides a good example, as the level of details cabin crew receive on the item during training provided by different operators may vary.

comment *26* comment by: *UNSA-SMAF*

Re. Type Specific Data for Cabin Crew Training

UNSA supports Option 2: Comprehensive information on all areas related to cabin crew operation in addition to areas described in Option 1 is a prerequisite for a minimum syllabus of training in order to ensure that cabin crew will be sufficiently trained to cope with any emergency situation.

Re. Determination of new type or variant

NCCU supports Option 3 as this would lead to an evaluation of all relevant elements and their combined impact on safety issues.

response	*Noted* NOTED Thank you for the support.

comment	*60* comment by: *SCCA/ head of health and safety* Type Specific Data for Cabin Crew Training I support Option 2 Determination of new type or variant I support Option 3
response	*Noted* NOTED Thank you for the support.

B. DRAFT DECISION ON CERTIFICATION SPECIFICATIONS AND GUIDANCE MATERIAL FOR OPERATIONAL SUITABILITY DATA (CABIN CREW DATA)

EASA

CERTIFICATION SPECIFICATIONS

for

Operational Suitability Data

Cabin Crew Data

CS-CCD

Book 1

SUBPART A

GENERAL

CS CCD.050 Scope

These Certification Specifications for Cabin Crew Data (CS-CCD) establish the specifications for the applicant for a type certificate, change approval or supplemental type certificate to develop and provide:

(a) data for the determination process of a new type or variant for cabin crew; and

(b) type specific data for cabin crew ~~training~~.

CS CCD.100 Applicability

These Certification Specifications are applicable to:

(a) aircraft with a ~~maximum~~ passenger seating ~~configuration~~ capacity of more than 19 seats; ~~and~~

(b) aircraft with a passenger seating capacity of 19 seats or less required to carry cabin crew; and

(c) any other aircraft with a ~~maximum~~ passenger seating ~~configuration~~ capacity of 19 seats or less if voluntarily elected by the applicant ~~to facilitate operations with cabin crew~~.

CS CCD.105 Definitions

Within the scope of these Certification Specifications, the following definitions apply:

(a) *Applicant* means an applicant for, or a holder of, a type certificate (TC), change approval or supplemental type certificate (STC), applying for the approval by the Agency of the related operational suitability data (OSD) for cabin crew.

(b) *Base aircraft* means an aircraft ~~or group of aircraft~~ used as a reference to compare differences with another aircraft.

(c) *Candidate aircraft* means an aircraft ~~or group of aircraft~~ subject to the evaluation process.

(d) *New type* means an aircraft ~~or group of aircraft~~ having differences requiring a completion of aircraft type specific training.

(e) *Passenger deck* means a deck where passenger seats and/or cabin doors/exits are installed.

(f) *Passenger seating capacity* means the passenger seating capacity of the aircraft that is subject to initial TC process as specified in the relevant type certification data sheet or the maximum passenger seating configuration of an individually configured aircraft.

(~~e~~g) ~~*Training provider*~~ *End user* means an operator or training organisation approved by the competent authority to provide training courses for cabin crew.

(~~f~~h) *Type specific data* means all ~~design and~~ design related data relevant to new type(s) or variant(s) ~~within the same type~~.

(~~g~~i) *Variant* means an aircraft ~~within the same type~~ that has significant differences to the base aircraft ~~and for which differences training is required~~ requiring differences training.

CS CCD.110 OSD box concept – status of provided data

CS-CCD specifies data provision of which is required from the applicant and data provided at request of the applicant. Data provided by the applicant is presented as mandatory or non-mandatory (recommendations) for the end user.

1. Data required from the applicant and mandatory for the end user:

   CS CCD.200

   CS CCD.205

   CS CCD.210

   Appendix 1 to CS CCD.200(b)(1)(a)

   CS CCD.300

   CS CCD.310

   Appendix 1 to CS CCD.310

   CS CCD.400

2. Data required from the applicant and non-mandatory (recommendations) for the end user:

   CS CCD.215

   CS CCD.400

3. Data at request of the applicant and mandatory for the end user:

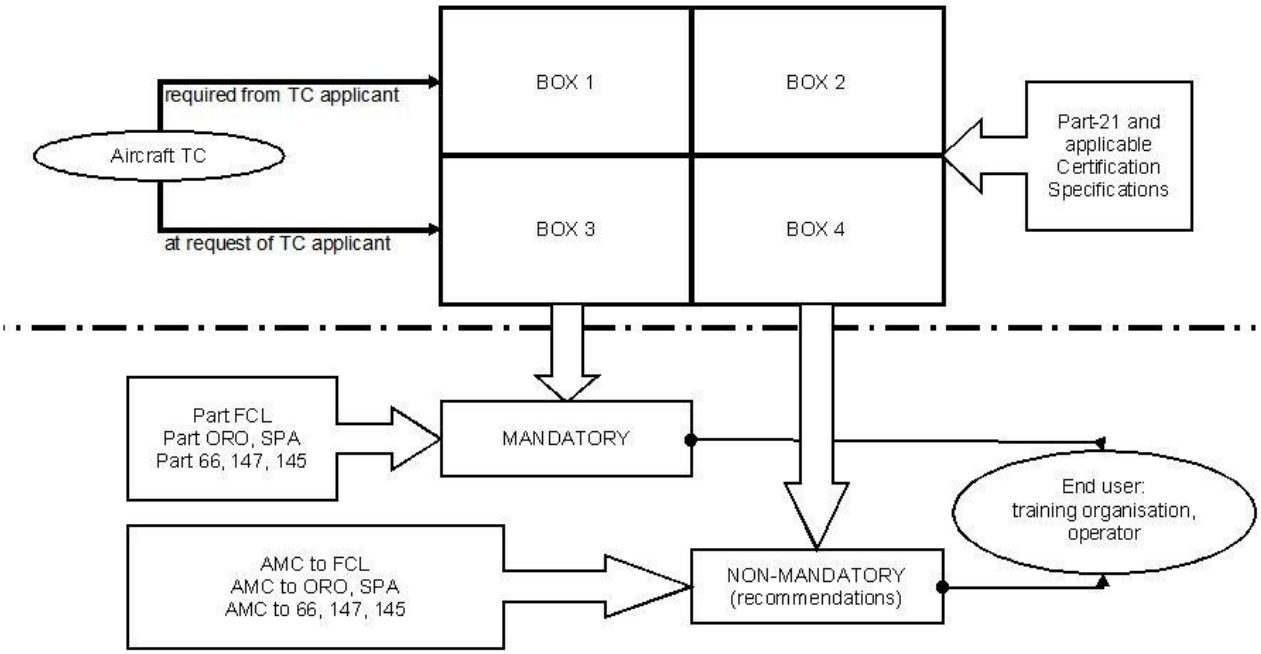
   Appendix 1 to CS CCD.200(b)(1)(b)

   CS CCD.305(a)

4. Data at request of the applicant and non-mandatory (recommendations) for the end user:

   CS CCD.305(b)

Appendix 1 to CS CCD.110 OSD box concept – status of provided data



Box 1: required from the applicant; mandatory for end users

Box 2: required from the applicant; non-mandatory (recommendations) for end users

Box 3: at request of the applicant; mandatory for end users

Box 4: at request of the applicant; non-mandatory (recommendations) for end users

SUBPART B

DETERMINATION OF A NEW TYPE AND A VARIANT

CS CCD.200 Determination process

The candidate aircraft is determined as a new type or a variant of the base aircraft following the determination process conducted by the Agency. For this purpose the applicant:

(a) identifies differences by comparing ~~at least~~ the type specific elements specified in CS CCD.205; and

(b) completes an aircraft difference table using:

(1) the ~~aircraft difference table using the~~ form specified in Appendix 1 to CS CCD.200(b)(1); or

(2) the applicant's ~~standard~~ form provided it contains the ~~at least all applicable~~ elements specified in ~~the aircraft difference table~~ Appendix 1 to CS CCD.200(b)(1) as applicable to the candidate aircraft, and the form is acceptable to the Agency.

CS CCD.205 Determination elements

(a) At least the following type specific elements, as specified in Appendix 1 to CS CCD.200(b)(1) are assessed to determine whether a candidate aircraft is a new type or a variant of the base aircraft:

(1) aircraft configuration;

(2) doors and exits;

(3) aircraft systems; and

(4) normal and emergency operations.

(b) When identifying differences ~~determining the similarity~~ of the elements specified in (a), the applicant assesses the following:

(1) ~~for~~ aircraft configuration:

(i) number of aisles - single/~~twin~~ multi; narrow/wide-bodied; and

(ii) number of passenger decks; ~~and~~

~~(iii) customised configuration for rotorcraft or business/private aircraft, as applicable;~~

(2) ~~for~~ doors and exits:

(i) number, types and location;

(ii) direction of movement of the operating handle;

(iii) direction of door/exit opening;

~~(iii)~~(iv) door/exit arming/disarming;

~~(iv)~~(v) power assist mechanism;

~~(v)~~ (vi) assisting evacuation means; and

~~(vi)~~(vii) door/exit electrical warning system; ~~and~~

~~(vii) number, types and location of doors and exits;~~

(3) ~~for~~ aircraft systems:

(i) system operation (i.e. system function, method of operation, malfunction, reset, duration); and

(ii) location;

(4) ~~for~~ in normal and emergency operations, any ~~design or~~ design-related element that would impact on normal operations and/or emergency operations.

CS CCD.210 Determination of a new type

(a) The candidate aircraft is determined a new type:

(1) if so documented in the application and demonstrated to the Agency; or

(2) as a result of the determination process required by CS CCD.200.

(b) ~~For the purpose of (a)(2), t~~ The candidate aircraft is determined a new type if ~~one or more of~~ the type specific elements of CS CCD.205(b)(1) and (b)(2) are different ~~neither identical nor similar~~ to the base aircraft. The following need not be a factor in determining the candidate aircraft as a new type unless further differences are identified in accordance with CS CCD.210(e):

(1) one additional pair of doors/exits of the same type and operation as any type installed on the base aircraft; or

(2) doors/exits that are de-rated; or

(3) self-help exit types as defined by CS-25.

~~Self-help exits alone, for example Type III and Type IV exits, need not be a factor to determine candidate aircraft as a new type.~~

(c) When identifying differences in accordance with CS CCD.205(b)(2)(i), if the location of doors/exits is the same but the type of installed door/exit is different to the base aircraft, this does not lead to determination of the aircraft as a new type.

(d) If differences are identified in CS CCD.205(b)(3) only, this does not lead to determination of the candidate aircraft as a new type.

(e) If no differences are identified in the type specific elements of CS CCD.205(b)(1) and (b)(2) but differences are identified in the type specific elements of CS CCD.205(b)(3) and/or (b)(4) and one or more of the differences specified in CS CCD.210(b)(1) or (b)(2) or (b)(3), the combined impact of ~~the~~ those differences is assessed and possible determination of the candidate aircraft as a new type is considered.

CS CCD.215 Determination of a variant

(a) The candidate aircraft that has not been determined as a new type is determined a variant of the base aircraft.

~~(b) All determination elements in accordance with CS-CC-205 are considered when identifying differences between base aircraft and candidate aircraft.~~

(~~c~~b) Existing ~~The~~ differences and their assessed impact are compiled in the aircraft difference table in accordance with CS CCD.200(b)(1), or using the applicant's standard form in accordance with CS CCD.200(b)(2), to support the development of the differences training by ~~training provider~~ end user(s).

Appendix 1 to CS CCD.200(b)(1)

For the purpose of filling in the aircraft difference table, the applicant selects the base and the candidate aircraft.

The aircraft difference table complies with the following format, or equivalent in accordance with CS CCD.200(b)(2).

Appendix 1 to CS CCD.200(b)(1) Aircraft difference table

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes **~~No~~**		**~~No I~~ Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
AIRCRAFT CONFIGURATION						
Single aisle						
Multi aisle						
Narrow-bodied						
Wide-bodied						
~~Customised configuration of business or private aircraft~~						
~~Rotorcraft~~						
Single passenger deck						
Multi passenger deck						
DOORS AND EXITS						
~~Entrance/Service doors/Emergency exits~~						

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes **~~No~~**		**~~No I~~ Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
Type(s)						
Number						
Location						
Features (e.g. door/exit assist handles)						
Controls (e.g. door/exit locking indicators)						
Electrical operation and malfunction						
Direction of movement of the operating handle						
Direction of door/exit opening						
Door/exit arming/disarming						
Power assist mechanism and malfunction						
Door/exit electrical warning system						

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes **~~No~~**		**~~No I~~ Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
Operation from inside in normal mode						
Operation from inside in emergency mode						
Operation from outside						
Integral stair						
Assisting evacuation means						
Type, ~~and~~ number and location of units (e.g. escape slide/slide raft/ramp slide~~/life raft~~)						
Type and number of additional floatation means (e.g. life raft)						
Single/multi-lane units						
~~Length and width of units~~						

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes **~~No~~**		**~~No I~~ Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
~~Single/multi buoyancy chamber units~~						
Life lines						
~~Location and stowage of units~~						
~~Location for additional floatation means (e.g. life raft)~~						
~~Description and operation / Deployment~~ Operation (automatic/manual/electrical) and inflation time ~~duration~~						
Slide girt bar engagement ~~arm/disarm~~ (manual/automatic)						
Signalling means of slide readiness (e.g. stop sign/barber pole)						
Capacity and overload						
Detaching and separating from aircraft						

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes ~~**No**~~		~~**No I**~~ **Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
~~Canopy installation~~						
~~Limited operation of inverted slide/life raft~~						
Slide/life raft ~~equipment (incl.~~ survival kit (integral/separate)						
Possibility to transfer ~~of~~ slide/raft to another door/exit						
~~Possibility to use slide/raft as a hand held chute~~						
Emergency signalling system (e.g. attached ELT; built-in radio locator beacon (RLB)) and activation ~~operation~~ on land/in water						
AIRCRAFT SYSTEMS						
(a) emergency lighting system:						

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes **~~No~~**		**~~No I~~ Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
Controls						
Interior emergency lighting						
Exterior emergency lighting						
(b) evacuation alarm signal system:						
Availability of activation/indication panel (flight crew/cabin compartment)						
Alert indications						
(c) smoke detection system:						
Function						
Alert indications (aural/visual)						
Availability of smoke barrier						
(d) automatic fire extinguishing system:						

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes **~~No~~**		**~~No I~~ Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
Function of built-in fire extinguishing system						
(e) drop-down oxygen system:						
Type (e.g. gaseous, chemical)						
Activation						
Indications associated with activation of oxygen system (changes of cabin altitude);						
(f) communication system:						
Location of handset unit(s)						
Possibility of interphone calls in normal and emergency circumstances between cabin and flight crew compartment						
Availability of aural/visual indications						

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes **~~No~~**		**~~No I~~ Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
associated with interphone calls in normal and emergency circumstances						
Signalling panels associated with communication system						
(g) public address system:						
Location of microphone unit when independent from handset unit						
~~Public announcement broadcast to the entire cabin compartment~~						
Priority order of public announcement system (flight crew handset/~~purser~~ senior cabin crew member handset/any other cabin crew handset/evacuation signal alarm)						

Aircraft difference table						
Base aircraft						
Candidate aircraft						
Determination elements	**Existing difference from base aircraft**	**Description of identified differences**	**Impact assessment**			
			(a)		**(b)**	
	Yes **~~No~~**		**~~No I~~ Impact on description of the element**	**Impact on operation of the element**	**Potential impact on procedures**	**Combined impact on operation of the element and potentially on procedures**
(h) control panels:						
Cabin crew panel(s) - controls related to evacuation, lavatory smoke, emergency lights						
(i) water system:						
Availability of manual water shut-off valve						
(j) other systems as applicable:						
NORMAL AND EMERGENCY OPERATIONS						
Design-related element(s) impacting on normal and/or emergency operations relevant to the aircraft type						

SUBPART C

TYPE SPECIFIC DATA FOR CABIN CREW ~~TRAINING~~

CS CCD.300 ~~Mandatory provision of d~~ Data required from the applicant

(a) The applicant includes the following in the type specific data for cabin crew:

(1) all necessary data in accordance with CS CCD.310 to ~~become the basis for~~ support the development of type specific training programme(s); and

(2) all necessary data in accordance with CS CCD.205 to ~~become the basis for~~ support the development of differences training programmes.

CS CCD.305 ~~Voluntary provision of s~~ Supplementary data provided at request of the applicant

In addition to CS CCD.300, the applicant may elect to provide supplementary data to support the development of relevant training programme(s) by end user(s), such as:

(a) ~~type specific data to be used as the mandatory basis by training provider(s), such as~~ data which can include, but is not limited to, additional equipment and components, when supplied by the applicant:

(1) portable safety and emergency equipment ~~when supplied by the applicant~~;

(2) passenger seat (seatbelt; seat operation; passenger control unit (PCU); body support floatation equipment where relevant);

(3) overhead stowage compartment (direction of opening/closing; weight limit);

(4) galley components (steam/microwave oven; bakery warmer; freezer; supplemental cooling system; hot beverage brewers/steamers; trash compactor);

(5) layout/description and use of installed galley compartments/components;

(b) data used on a ~~voluntary~~ non-mandatory (recommendations) basis by ~~training provider(s)~~ end user(s), such as information that may be based on the training provided to cabin crew members participating in the emergency evacuation demonstration required by CS 25.803:

(1) theoretical and practical modules for training programmes;

(2) delivery methods of the relevant training elements;

(3) duration of training to ensure the attainment of required knowledge and skills.

CS CCD.310 Type specific data content

The applicant includes in the type specific data for cabin crew at least the following elements in accordance with Appendix 1 to CS CCD.310, as applicable:

(a) aircraft description, including:

(1) general;

(2) flight crew compartment;

(3) cabin compartment; and

(b) aircraft systems including associated equipment.

Appendix 1 to CS CCD.310

Type specific data content

The type specific data for cabin crew include the following, as ~~applicable~~ relevant to the candidate aircraft:

Aircraft description

General

(a) type of aircraft – narrow/wide-bodied; single/multi passenger deck;

(b) range of operation and maximum operating altitude;

(c) principal dimensions (length; height; width; wing span);

(d) main characteristics (engines; landing gear; fuel tanks; flight controls; speed; maximum take-off weight);

(e) engine danger area;

(f) general information (air conditioning; pressurisation system; electrical power; auxiliary power unit (APU); slats; flaps);

(g) location of cargo compartments and un-pressurised areas;

(h) entrances and emergency exits (entrance and service doors; emergency exits; flight crew compartment window; flight crew compartment emergency hatch; avionics compartment);

(i) passenger seating capacity (as determined during the ~~applicable~~ relevant TC, change to TC or STC ~~certification~~ process);

(j) required number ~~and composition~~ of flight crew, number and location of ~~and~~ cabin crew stations (required and additional) ~~identified by the evacuation demonstration or analysis~~;

(k) aircraft crash estimated attitudes (e.g. nose or main landing gear retracted; afloat following a ditching).

Flight crew compartment

(a) layout - number and type of installed seats (e.g. column mounted; comfort seat; folding seat);

(b) description and operation of installed seat type (electrical/ manual; vertical/horizontal/recline/rotating movement; restraint system, i.e. seat belt/crotch strap/shoulder harness and locking mechanism);

(c) oxygen system (stowage; type and description of mask; smoke goggles; N/100% and Emergency pressure selector; operation);

(d) flight crew compartment door and its monitoring system:

(1) door type (e.g. intrusion/penetration resistant);

(2) door components (e.g. locking latches; mortise lock; escape/decompression panel; viewing lens);

(3) door access control panel (in the case of installed security bullet proof door);

(4) door operation – normal/emergency access;

(5) means of monitoring (viewing lens; CCTV system);

(e) exits and escape routes (primary/secondary; sliding window; emergency exit hatch; door escape panel) and escape devices (escape rope; inertia reels);

(f) avionics compartment (location; purpose; operation of avionics access hatch; access from inside/outside).

Cabin compartment

(a) layout:

(1) number and type of installed crew seats (e.g. swivel/high-comfort/folding seat);

(2) description and operation of installed crew seats (restraint system, i.e. seat belt/shoulder harness; quick release buckle; shoulder harness inertial mechanism);

(b) doors and exits - entrance/service doors/emergency exits:

(1) type(s) and number of door(s)/exit(s)/location/sill height;

(2) description of features/controls/operation – manual/electrical and malfunction;

(3) operation from inside in normal/emergency modes;

(4) operation from outside;

(5) arm/disarm system;

(6) power assist system and malfunction;

(7) integral stair;

(8) crew assist space;

(9) life lines;

(10) access door/opening port to cargo compartment from cabin compartment;

(11) critical surfaces on aircraft wings requiring 'no step' precautions;

(12) water level door clearance;

(c) escape slide/slide raft/ramp slide/life raft:

(1) location and stowage;

(2) type and number of units (single/multi lane; single/multi buoyancy chamber/length and width);

(3) description and operation;

(4) slide arm/disarm;

(5) deployment and duration (automatic/manual);

(6) signalling means of slide readiness (e.g. stop sign/barber pole);

(7) capacity and overload;

(8) detaching and separating from aircraft;

(9) canopy installation;

(10) limitation/operation of inverted slide/life raft;

(11) slide/life raft equipment (description/operation/use);

(12) attached survival kit (location/content/operation);

(13) malfunction (transfer of slide/raft to another door; use as a hand held chute);

(14) emergency signalling system (e.g. attached ELT, built-in radio locator beacon (RLB) – operation on land/in water);

(d) crew rest compartment:

(1) location(s) and layout;

(2) description and operation of entrance door and applicable access control panel;

(3) escape routes/emergency exit hatch – description/location/operation from the crew rest/cabin compartment;

(4) systems (fire/smoke detection and prevention; oxygen; communication; lighting; air conditioning);

(5) crew control panels;

(6) cabin signs;

(e) lavatories:

(1) smoke detection system;

(2) built-in automatic extinguishing system;

(3) water system (water supply/water shut-off/water heater);

(4) waste system;

(5) flush/vacuum reset;

(6) electrical power;

(7) lavatory service unit (LSU);

(8) lavatory door - lock/unlock system from inside/outside;

(9) operation of waste bin flap;

(f) passenger service unit (PSU) (oxygen container; pictogram(s); loudspeaker; reading light; call light; seat row identifier; air vent);

(g) lift – location; description and operation; control panel; malfunction;

(h) galley - description of galley systems.

Aircraft systems including associated equipment

(a) lighting system:

(1) location and operation;

(2) interior normal and emergency lighting (ceiling; door sill; over wing exit handle light; exit location/marking sign; floor proximity escape path marking);

(3) exterior emergency lighting (slide/raft integrated emergency lights; over wing lights);

(b) evacuation alarm signal system:

(1) description, location and operation of activation/signal panel(s) (flight crew/cabin compartment);

(2) aural/visual alert indications;

(3) horn silence at cabin door/exit and flight crew compartment;

(c) smoke detection system:

(1) location and function (passenger cabin/lavatory/crew rest compartment(s)/cargo compartment);

(2) location and description of aural/visual indications (warning chime/light; signalling means; reset);

(3) potential cause of smoke alarm activation;

(4) smoke barrier/removal (e.g. crew rest compartment staircase hatch; smoke curtain - description/operation/pre-flight check);

(d) fire prevention system:

(1) type – automatic/manual (e.g. temperature sensor; FES Discharge switch (fire extinguishing system));

(2) location and function of built-in fire extinguishing system (crew rest compartment(s); lavatory/cargo compartment/engines);

(3) built-in fire extinguishers – type of agent/content/operation/duration;

(e) oxygen system:

(1) location (passenger cabin/crew station/crew rest compartment(s)/ lavatory/galley);

(2) number and distribution of masks in container unit(s);

(3) activation/operation/duration of oxygen system and malfunction;

(4) aural and visual indications associated with activation of oxygen system;

(5) medical oxygen port;

(f) electrical system:

(1) galley - hot water container; control panel – control switches; circuit breakers; galley emergency power off switch;

(2) lift (unit operation; control panel; circuit breakers systems~~/stop switch on secondary power distribution box (SPDB)~~);

(3) door electrical warning system (cabin pressure/slide armed/safeguard sensor);

(4) power socket (flight crew/cabin compartment);

(5) lavatory (razor outlet; built-in hairdryer; water heating system);

(6) passenger seat (electrical operation; seat power outlet);

(7) video control centre/passenger individual screen/cabin main screen;

(8) aircraft own electrical power and APU;

(g) communication system:

(1) location of handset unit(s) (crew station/flight crew/crew rest compartment(s));

(2) description and use of interphone integrated keys;

(3) operation of interphone and initiating calls in normal and emergency circumstances (calls: cabin to flight crew compartment; cabin crew to cabin crew station; cabin/flight crew compartment to crew rest compartment(s); cabin crew/flight crew to purser and vice versa);

(4) aural/visual indications associated with interphone calls in normal and emergency circumstances;

(5) location and description of signalling panels associated with communication system;

(6) emergency communication alert system (ECAS) – description/location/operation in cabin and flight crew compartment;

(h) passenger address system:

(1) location/description/operation of handset unit(s) (crew station/flight crew compartment/crew rest compartment(s));

(2) description of operation in cabin/flight crew/crew rest compartment(s);

(3) description/operation of the public announcements broadcast to the entire/individual cabin compartment(s);

(4) availability of loudspeakers in passenger cabin/flight crew/crew rest compartment(s)/galley/lavatory and muted volume;

(5) description of the priority order of public announcement system (e.g. flight crew handset/purser handset/any other cabin crew handset/evacuation signal alarm);

(6) automatic broadcast of public announcements (description / operation);

(i) passenger call system:

(1) location of activation (passenger seat/lavatory);

(2) way to initiate/cancel/disable passenger call system;

(3) signalling system (indication (aural/visual); control panels);

(j) water system:

(1) areas of supply;

(2) location and operation of water supply manual shut-off valve (galley/lavatory; partial or entire cabin supply);

(3) water tanks (location of checking water tanks status);

(k) waste system:

(1) location (galley/lavatory);

(2) waste tanks (location of checking waste tanks status);

(l) air conditioning/ventilation/pressurisation – source of supply (engines/external ground power (EGP)/APU); control management);

(m) control panels:

(1) cabin crew panel (cabin management system) – main/additional panel(s); location; description of installed functions; operation; malfunction;

(2) cabin crew indication panel - type (i.e. area indication panel/area call panel); location (crew station/galley/crew rest compartment(s)); description of functions;

(3) cabin air/floor temperature control panel – location and operation; areas of effect;

(4) cabin signs – location (door/exit area; passenger cabin; crew station; crew rest compartment(s); galley; LSU); type (e.g. fasten seatbelt/no smoking/return to seat/lavatory occupied/exit sign); aural/visual indication;

(n) other systems – installed emergency locator transmitter.

SUBPART D

CABIN ASPECTS OF SPECIAL EMPHASIS

CS CCD.400 Cabin aspects of special emphasis

In accordance with Part-21A.15(d)(6), the applicant includes, as applicable, any information relevant to the aircraft that cabin crew and end users should be aware of. Such information can include, but is not limited to:

(a) information identified during emergency evacuation demonstration required by CS 25.803, such as:

(1) passenger movement during evacuation including door/exit overload,

(2) dried up door/exit and subsequent re-direction,

(3) door/exit by-pass recommendations,

(4) general crowd control,

(5) seating location of cabin crew members,

(b) other unique elements identified during the certification process, e.g. direct view, trolley lift barrier, external viewing means, remote cabin areas, etc.

EASA

CERTIFICATION SPECIFICATIONS

for

Operational Suitability Data

Cabin Crew Data

CS-CCD

Book 2

GM1 CCD.205(b)(2)(v) Determination elements

ASSISTING EVACUATION MEANS

Assisting evacuation means include, but are not limited to, escape slide, slide raft, ramp slide, life raft, life lines, signalling means of slide readiness, e.g. barber pole or stop sign.

GM1 CCD.205(b)(4) Determination elements

NORMAL AND EMERGENCY OPERATIONS

Design ~~or design~~ related elements that could impact on normal operations and/or emergency operations include, but are not limited to, cabin interior stairs, smoke barrier, e.g. smoke curtain.

GM1 to Appendix 1 to CS CCD.200(b)(1) Aircraft difference table

INSTRUCTIONS

The ADT may be used by the applicant to include, in addition to the listed elements, a detailed list of differences between the base and the candidate aircraft. For the purpose of filling in the aircraft difference table to identify differences between the base and the candidate aircraft, the following instructions should apply:

1. Differences to any of the specified determination elements should be identified in column 'Existing differences from the base aircraft';
2. Identified differences should be described in column 'Description of identified differences';
3. The corresponding sub-column(s) should be marked in the part ~~of~~ 'Impact assessment' ~~should be marked~~, as relevant to the assessed element.~~:~~

GM2 to Appendix 1 to CS CCD.200(b)(1) Aircraft difference table

IMPACT ASSESSMENT (a)

Part 'Impact assessment (a)' represents required provision from the applicant and mandatory application by the end user.

~~a.~~ 1. Column '~~*No*~~ ~~*i*~~ *Impact on description of the element*' should be marked ~~if~~ when there is an identified difference and ~~affects neither the operation of the element nor potentially the procedures, however,~~ the information of the identified difference needs to be provided to the user (cabin crew), e.g. location of manual water shut-off valve, location of emergency lighting control button on ~~forward attendant panel (FAP)~~ cabin management system panel. ~~Identification implies knowledge requirement attained by self-instruction or aided instruction as applicable.~~ The column implies a knowledge requirement.

~~b.~~ 2. Column '*Impact on operation of the element*' should be marked if the identified difference affects the operation of the element, e.g. power assist mechanism on door/exit, detaching and separating slide raft from the aircraft, installation of canopy, controls related to evacuation, smoke, emergency lights on cabin crew control panel. ~~Identification implies knowledge requirement attained by aided instruction and potentially hands-on training where required.~~ The column implies knowledge and hands-on training requirement.

GM3 to Appendix 1 to CS CCD.200(b)(1) Aircraft difference table

IMPACT ASSESSMENT (b)

Part 'Impact assessment (b)' represents provision at request of the applicant and mandatory application by the end user. The applicant may elect to provide the information to support the operator in identifying those areas which may require a review of procedures by the operator in relation to the identified difference.

~~c.~~ 1. Column '*Potential impact on procedures*' should be marked to indicate that operators, in relation to the identified difference, may need to assess if their procedures need to be amended, or new procedures be developed, e.g. built-in fire extinguishing system, evacuation alarm alert indications, capacity and overload of slide raft. Identification implies knowledge requirement attained by aided instruction.

~~d.~~ 2. Column '*Combined impact on operation of the element and potentially on procedures*' should be marked to indicate that the identified difference affects the operation of the element and may require the operators to assess if their procedures need to be amended or new procedures be developed, e.g. function of smoke detection system, door/exit electrical warning system, communication system. Identification implies knowledge requirement attained by aided instruction and hands-on training.

~~**GM1 CS-CC-305(b)**~~

~~VOLUNTARY USE OF DATA~~

~~Voluntary use of data refers to information or practices presented by the applicant and considered by the training providers as recommendations that may be used when developing corresponding training programmes.~~

GM1 to Appendix 1 to CS CCD.310 Type specific data content

SOURCE DOCUMENTS FOR TYPE SPECIFIC DATA

Type specific data for cabin crew need not be developed new by the applicant. They may originate from any technical documentation issued by the original manufacturer of the aircraft, aeronautical products, parts or appliances (e.g. aircraft flight manual (AFM), aircraft operating manual (AOM), aircraft maintenance manual (AMM), component maintenance manual (CMM), design documentation).

TYPE SPECIFIC DATA

Type specific data required by this Appendix contain detailed technical information useful for cabin crew to obtain general knowledge on the type of aircraft they are to be qualified on. ~~The detailed technical information may not necessarily be examined or checked unless specified by the applicable operational requirements and/or if determined by the training provider(s).~~

Annex A – Attachments to the comments

AEA comments to NPA 2011-10-divided into comments-RPS.pdf

Attachment #1 to comment #79

arff737.pdf

Attachment #2 to comment #31

OSD_Overview.pdf

Attachment #3 to comment #47