NOTICE OF PROPOSED AMENDMENT (NPA) NO 2009-01

DRAFT OPINION OF THE EUROPEAN AVIATION SAFETY AGENCY

For a Commission Regulation amending Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations

and

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

Amending Decision No. 2003/1/RM of the Executive Director of the European Aviation Safety Agency of 17 October 2003 on acceptable means of compliance and guidance material for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ("AMC and GM to Part 21")

"Operational Suitability Certificate"

and

"Safety Directives"

Executive Summary

Operational Suitability Certificate (OSC)

With the new basic regulation, EASA has been given the responsibility to approve relevant information necessary for the safe operation of a specific aircraft type. This information relates to type specific elements for training of pilots, cabin crew and maintenance certifying staff and includes also the Master Minimum Equipment List (MMEL). The information will be approved under a new approval: the Operational Suitability Certificate (OSC).

Previously, this information was established under the Joint Operations Evaluation Board (JOEB) of the Joint Aviation Authorities (JAA). Since the JAA will close in 2009, it is necessary to transfer the JOEB into the Community regulatory framework. The intention is, however, to retain as much as possible the JOEB process for EASA approval of the OSC.

The manufacture, who is the holder of the Type Certificate (TC), shall apply for the OSC. EASA will issue the OSC if the information meets the applicable standards. It will be a certificate complementing the TC. The OSC must be obtained by the TC holder before the aircraft is operated by a Community operator. The OSC is applicable to all aircraft categories. However, for aircraft other than complex motor-powered aircraft, EASA will develop generic elements of the OSC that can be used by the TC holders of those aircraft. The OSC applicants for aircraft other than complex motor-powered will only need to make a statement that these generic elements are appropriate.

Once issued, the approved elements in the OSC must be used by the operators of the particular aircraft type. These approved elements will be the basis for the development of the type training courses for pilots, cabin crew and maintenance certifying staff, as well as for the Minimum Equipment List (MEL).

Any legal entity (e.g. operators, training organisations) can apply for a supplemental OSC if they either wish to exceed the limitations or to simply change elements of the OSC.

Safety Directives (SD)

EASA will have the possibility to issue safety directives in the two following scenarios:

- Reacting to general safety problems: retro-active measures that in the JAA system were or would have been included in JAR-26 “Additional Airworthiness Requirements for Operations”; and

- Mandatory corrections of shortcomings identified in OSC elements.

Safety directives must be implemented by the relevant aircraft owner, operator or training organisation.

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A. Explanatory Note

I. General

1. The purpose of this Notice of Proposed Amendment (NPA) is to envisage amending Regulation (EC) No 1702/2003[1] and Decision 2003/1/RM of the Executive Director of 17 October 2003[2] to establish the Implementing Rules and acceptable means of compliance and guidance material related to the issuance of Operational Suitability Certificates (OSC), supplements to these certificates (Supplemental Operational Suitability Certificate (S-OSC)) and Safety Directives (SDs). The scope of this rulemaking activity is outlined in Terms of Reference (ToR) for task 21.039 and is described in more detail below.

2. The European Aviation Safety Agency (hereinafter referred to as the Agency) is directly involved in the rule-shaping process. It assists the Commission in its executive tasks by preparing draft regulations, and amendments thereof, for the implementation of the Basic Regulation (BR)[3] which are adopted as "Opinions" (Article 19(1)). It also adopts Certification Specifications, including Airworthiness Codes and Acceptable Means of Compliance and Guidance Material to be used in the certification process (Article 19(2)).

3. When developing rules, the Agency is bound to following a structured process as required by Article 52(1) of the BR. Such process has been adopted by the Agency's Management Board and is referred to as "The Rulemaking Procedure"[4].

4. This rulemaking activity is included in the Agency's Rulemaking Programme for 2009. It implements the rulemaking task 21.039.

5. The text of this NPA has been developed by the Agency, based on the inputs of the 21.039 rulemaking group and its subgroups. It is submitted for consultation of all interested parties in accordance with Article 52 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.

II. Consultation

6. To achieve optimal consultation, the Agency is publishing the draft opinion and draft decision of the Executive Director on its internet site. Comments should be provided within 3,5 months in accordance with Article 6(5) of the Rulemaking Procedure. Comments on this proposal should be submitted by one of the following methods:

CRT: Send your comments using the Comment-Response Tool (CRT) available at **http://hub.easa.europa.eu/crt/**

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[1] Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations (*OJ L 243, 27.9.2003, p. 6*). Regulation as last amended by Commission Regulation (EC) No 1057/2008 of 27 October 2008 (OJ L 283, 28.9.2008, p. 30).

[2] Decision No 2003/1/RM of the Executive Director of the Agency of 17.10.2003 on acceptable means of compliance and guidance material for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations ("AMC and GM to Part 21"), last amended by Decision No 2007/12/R of the Executive Director of the Agency of 22.11.2007.

[3] Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p.1).

[4] Management Board Decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and GM ("Rulemaking Procedure"), EASA MB 08-2007, 13.6.2007

E-mail: In case the use of CRT is prevented by technical problems these should be reported to the CRT webmaster and comments sent by email to NPA@easa.europa.eu.

Correspondence: If you do not have access to internet or e-mail you can send your comment by mail to:
Process Support
Rulemaking Directorate
EASA
Postfach 10 12 53
D-50452 Cologne
Germany

Comments should be submitted by 30 April 2009. If received after this deadline they might not be taken into account.

III. Comment response document

7. All comments received in time will be responded to and incorporated in a comment response document (CRD). The CRD will be available on the Agency's website and in the Comment-Response Tool (CRT).

IV. Content of the draft opinion and decisions

A. Background

8. Currently the approvals of specifications for the operation of a given type of aircraft, such as the minimum syllabus for pilot type rating training, data for cabin crew type training and the Master Minimum Equipment List (MMEL), as well as that of technology linked with a certain type of operation, are the responsibility of the National Aviation Authorities (NAA). To promote uniformity, Joint Aviation Authorities (JAA) members decided to follow a single approval process acceptable to all - the Joint Operations Evaluation Board (JOEB). Each JOEB is established on a case-by-case basis and, composed of relevant stakeholders, including non-JAA authorities if appropriate, to examine the operational conditions for the use of an aircraft type and to make the related recommendations as appropriate.

9. JOEBs may also address the qualification of simulators or Synthetic Training Devices (STD) used for pilot type rating training on new products[5].

10. The JOEB process under the JAA umbrella is a voluntary process for the Type Certificate (TC) holders and/or TC applicants.

11. Despite such a joint action, each authority involved (NAAs and/or non-JAA authorities) has to transpose the recommendations into its national legislative and administrative system. Consequently, the final result may differ to the one arising from the JOEB process.

12. There is currently no formal requirement for the TC holder to establish a minimum syllabus of maintenance certifying staff type rating training. Any syllabus, which they do establish are subject to approval by the NAA. Alternatively the syllabus may be established by an approved Part-147 organisation. Also, the additional airworthiness

[5] Joint JAA STD Evaluation Team (JSET) Terms of Reference are published on the JAA website and endorsed by the JAAC on the 1st of May 2005.

(http://www.jaa.nl/secured/Operations/Public%20Documents/JOEB/ToRs/JSET%20TORS27apr2005.pdf)

requirements, which are necessary for certain types of operation (e.g. use of current airworthiness standards for cabin material and seat cushions), are incorporated into operational rules or Joint Aviation Requirement 26 (JAR-26) or Airworthiness Notices. As a result the whole set of specifications applicable for the operation of a given type of aircraft vary from one Member State to the other.

13. To provide for uniformity, which was one of the main objectives for establishing the EASA system, the Agency recommended in its Opinion No 3/2004[6] that the additional airworthiness specifications for a given type of aircraft and operation identified for example by the JOEB process, should be mandatory for all aircraft registered by Community Member States. This could be achieved by the adoption of an Agency decision based on the amendment to the Basic Regulation.

14. The European Commission, however, considered that such a decision can only be adopted by the Agency if it is directly linked to the product it is related to (individual decision with a clear addressee) as, according to its interpretation of the EC Treaty and European Court of Justice jurisprudence, agencies cannot set generally applicable binding standards. Hence the need to approve these additional specifications by linking them to the aircraft and to the TC they complement

15. It has always been the Agency's intention to mirror the current JOEB process unless the affected stakeholders indicate a preference for alternative certification process.

16. The European Commission adjusted the Agency's Opinion No. 3/2004 to take into account the abovementioned legal constraints and proposed that the additional specifications for the operation of a given aircraft type shall be determined as part of the certification of the product. Consequently, the following elements were added to Article 5(5)(e) of the BR:

> *(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 appropriated and additional airworthiness specifications for a given type of operations to ensure compliance with Article 8'.*

17. These provisions were adopted as such by the Legislator. The subject of the present NPA is to define the conditions under which they will be implemented and how the Agency will issue the decision mandating the related additional specifications for the operation of a given aircraft type.

18. In parallel to the developments described above, the Agency made a first step to better describe the minimum syllabi for maintenance certifying staff, by the initiation of rulemaking task 66.011 and the associated publication of NPA 2007-07[7]. The proposals provide more guidance on how to develop the maintenance training course. A full revision of Appendix III to Part 66 relative to the type training was carried out by:

    a. updating the theoretical elements;

    b. developing a matrix for the practical elements;

    c. introducing a minimum duration; and,

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[6] Opinion No 3/2004 of the European Aviation Safety Agency for amending Regulation (EC) No 1592/2002 of the European Parliament and of the Council on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, to extend its scope to the regulation of pilot licensing, air operations and third country aircraft, 16 December 2004. (http://www.easa.europe.eu/ws_prod/g/rg_opinions_main.php#2004)

[7] NPA 2007-07 "Privileges B1 and B2 AML and Type and Group Ratings and Type Training", issued 22 June 2007.

d. providing a better regulatory framework for the content of the syllabi.

B. Terms of Reference (ToR)

19. The ToR[8] describes the rulemaking task subject as the elaboration and adoption within the Community framework of additional airworthiness specifications for a given type of aircraft and type of operation.

20. The ToR identifies a list of items which are currently part of the JOEB process and for which appropriate approval requirements in Part-21 need to be created. The evaluation of the minimum syllabus for the maintenance certifying staff type rating training is also included in this list.

21. The ToR specify the following additional objectives:

(1) To define a simplified process for simple aircraft or 'aircraft other than complex motor-powered aircraft';

(2) To consider the need to develop Certification Specifications (CS) to provide the technical standards for the approval of the elements for operations;

(3) To define appropriate transition measures, including a catch-up process for existing types;

(4) To develop in Part-21 of the appropriate provisions allowing the Agency to adopt additional airworthiness specifications for a given type of operation (such as those specifications coming from JAR-26).

22. The ToR describes the following rulemaking task deliverables :

(1) To review and complete the list of additional specifications for operations to be approved;

(2) To clarify the "minimum syllabus" concept;

(3) To identify, review and conduct Regulatory Impact Assessments (RIAs) for the options identified for modifying Part-21 ;

(4) To produce an NPA containing the concept and associated draft rules.

23. The working method selected by the Agency on the advice of its rulemaking advisory bodies (the Safety Standards Consultative Committee (SSCC) and the Advisory Group of National Authorities (AGNA)) was the use of a rulemaking group. The rulemaking group discussions and considerations are described in section IV.C of this document.

24. The results of the work carried out by the Agency to accomplish the tasks described in the ToRs, taking into consideration the inputs of the rulemaking group, are presented in this NPA.

C. Rulemaking group composition, discussions and considerations

25. The composition of the drafting group 21.039 is published for information on the website of the Agency[9]. The group was composed of experts from the aircraft manufacturers industry and trade associations (ASD, AIA, GAMA) as well as experts from the air operators (IATA and AEA), pilots (ECA), maintenance engineers (AEI) and cabin crews (ETF) associations. National authorities (DGAC-France and Austrocontrol) and the Agency were also represented.

26. Foreign authorities (Federal Aviation Administration (FAA) from the USA and Transport Canada (TCCA) from Canada) were also invited to participate as observers as the result

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[8] The Terms of Reference are published in the website of the European Aviation Safety Page http://www.easa.europa.eu/getpdf.php?file=ws_prod/r/doc/TOR%2021.039%20Issue%202.pdf

[9] The rulemaking group 21.039 composition can be found in the following link: http://www.easa.europa.eu/getpdf.php?file=ws_prod/r/doc/gc/GC%2021.039%20Issue%203.pdf

of this task could obviously affect not only foreign industry but also foreign aviation authorities.

27. The rulemaking group started its activity in February 2007 and the proposals included in this NPA were reviewed during the rulemaking group's meeting in December 2008.

28. Additionally, the Agency decided to create several subgroups for the development of the CSs for each of the elements[10] to be approved by the Agency. The following subgroups have been created so far:

    (1) Subgroup responsible for the drafting of a CS for the approval of the Master Minimum Equipment List (MMEL);

    (2) Subgroup responsible for the drafting of a CS for the approval of the minimum syllabus for maintenance certifying staff type rating training; and

    (3) Subgroup responsible for the drafting of a CS for the approval of the minimum syllabus for pilot type rating training.

    The Agency envisages creating additional subgroups for the drafting of CSs for the approval of data for the cabin crew type training and reference data for the qualification of the associated simulators and generic CSs for aircraft other than complex motor-powered aircraft.

    Although the rulemaking group (core group) has already completed the development of the proposed amendment to Part-21, it is still active with a view to reviewing future NPAs containing the additional CSs mentioned above.

29. The work carried out by the rulemaking group (core group) was mainly to identify and to explore the possible options to implement and to transfer the JOEB process into a European regulatory framework. The options identified by the group are detailed in the Regulatory Impact Assessment in Appendix VI.

30. With input from the rulemaking group, the Agency conducted a Preliminary Regulatory Impact Assessment (pre-RIA) to explore the different options and to identify the most suitable option.

31. During the development of the proposed provisions in Part-21, the rulemaking group faced several challenges, which are described below so that the commenter can further evaluate the background of the proposals:

    (1) How to link the approval of the operational elements as listed in article 5 of the new Basic Regulation with the product or type certificate of that product. The options are described in Appendix VI.

    (2) The definition of the concept of minimum syllabus for pilots and maintenance certifying staff type rating training;

    (3) The review of the list of items in the ToRs and the determination of those which should be included as mandatory items versus those which should be only considered as voluntary (e.g. if they were included in the aircraft type certification or for which the applicant 'elects voluntarily to comply with');

    (4) The determination of appropriate, acceptable and reasonable transition measures for existing fleet including the conditions for a voluntary versus mandatory catch-up for existing models;

    (5) The ownership of the data being the output of the new certification process and the differences between the new and old systems;

[10] For ease of readability the term "elements" is used throughout the document in stead of the names of those individual items: MMEL, minimum syllabus for pilot type rating training and aircraft reference data to support the qualification of associated simulator, minimum syllabus for maintenance certifying staff type rating training and determination of type or variant for cabin crew and type specific data for cabin crew training.

(6) The determination of the type specific data for cabin crew type training instead of the minimum syllabus for cabin crew type rating training as initially mentioned in the ToRs;

(7) The determination of the necessary data for the evaluation and qualification of the simulators associated with the pilots type rating training as included in the new Basic Regulation and also in the ToRs;

(8) The development of appropriate and adapted provisions and processes for the operational evaluation of aircraft other than complex motor-powered aircraft;

(9) The link with Agency NPA 2007-07 and the establishment of appropriate interfaces between the NPA and this rulemaking task (e.g. link with the maintenance type rating training as stipulated in Appendix III to Part-66);

(10) Whether or not the Maintenance Review Board (MRB) process should be included in this system based on the commonality that exists today between the existing JOEB and MRB processes for the evaluation of data needed for the operation of new type certificated 'large' aircraft;

(11) The transposition of the JAR-26 into a feasible regulatory framework.

32. Taking into account the relevance of some issues highlighted above, the Agency would like to know the commenters' views on these points regarding the way the Agency has addressed them in the proposals. This will allow the Agency to create a balanced proposal for decision and adoption by the European Commission.

33. It should be highlighted at this point, that the Agency has decided to keep the MRB process separate from the new OSC process, because:

(1) Currently the output of the MRB process is considered to be contained in the Instructions for Continued Airworthiness as required by the applicable CS and therefore already included in the TC; and

(2) The MRB is not mentioned in the new provisions of article 5(5) of the BR.

D. Transfer of the JOEB into the Agency regulatory framework

i. The options explored by the drafting group 21.039

34. All of the options discussed by the drafting group are explained in more detail in the Regulatory Impact Assessment (RIA) (See Appendix VI). Each option describes a possible process for transferring the JOEB concept for future applications. The grandfathering of previous approvals and transition measures were discussed separately and the results of the discussions are detailed in section IV.F below.

ii. The preferred option: Operational Suitability Certificate

35. The Agency assisted by the rulemaking group extensively discussed the impacts and legality of various options as described in the attached RIA. Based on these discussions, the Agency concluded that the best option was to include the elements associated with the operation of a given type of aircraft in a certificate - the OSC, which complements the TC. TC holders shall obtain an OSC before the aircraft can be used by a Community operator, but the OSC is not a pre-condition to obtain a TC and the validity of the TC is not dependent on the availability of the approved elements. However, the existence of approved OSC elements is a condition for the operation of the aircraft by a Community operator, which are required by Part-OPS, Part-FCL, Part-66, Part-CC and Part-OR to use the elements approved in accordance with Part-21. In other words; the approved elements are the mandatory basis for which all Community operators or training organisations must develop their MEL, type rating training courses and so on.

This concept is further detailed hereunder and expressed in legislative terms in the attached draft amendments to the affected Parts.

36. The OSC of an aircraft type is issued by the Agency when the applicant has demonstrated that the elements comply with the applicable technical standards. These standards are included in CSs which are also issued by the Agency in accordance with the Rulemaking Procedure. There shall be a CS for each element: CS-MMEL, CS-pilot type rating training, CS-Flight Simulator Training Devices (for OSC applicants), CS-cabin crew type training and CS-maintenance certifying staff type rating training. All of these CSs are currently under development and will be open for consultation through publication of dedicated NPAs throughout the course of this year. To give an indication of the contents and structure of these CSs the table of contents for the draft CS-MMEL is attached to this NPA as Appendix V.

37. For new types[11], the TC holder is obliged to obtain an OSC containing the elements necessary for operation in the Community.

38. The applicant for the initial OSC is the TC holder. Changes to the initial OSC may be proposed by the OSC holder or any other legal entity. In the latter case, the change is called Supplemental Operational Suitability Certificate (SOSC).

39. If a Supplemental Type Certificate (STC) is developed, the STC holder must verify whether the STC affects one or more of the approved elements. If the OSC elements are affected (for example if new avionics requiring additional pilot training is installed), the STC holder must also apply for the approval of a supplement or changes to the OSC: an SOSC.

40. The procedural requirements for approval of the elements in the OSC are similar to those for a type certification. The rules for this process are therefore envisaged in a new Subpart C in Part-21. The OSC includes a Data Sheet - OSC DS - which contains the references to the documents which are the result of the Agency's approval. The contents of the elements are owned by (S)OSC holders, who are required to provide them to each entity that is required to comply with their contents. The OSC DS will be published on the Agency's website.

41. Appendix I explains the proposed regulatory provisions for (S)OSC applicants and holders (e.g. rights, privileges, obligations and responsibilities).

42. There is a significant difference between the way an OSC is established for complex motor-powered aircraft and aircraft other than complex motor-powered aircraft:

    - For complex motor-powered aircraft the CSs will contain only the standard with which the OSC applicant must show compliance with order to get the elements approved. As a consequence, the TC holder shall develop the elements and shall demonstrate to the Agency that they comply with the applicable CS.

    - For aircraft other than complex motor-powered aircraft the CSs will contain generic elements. The OSC applicant only needs to make a statement that these generic elements are sufficient for the applicant's aircraft type to ensure safe operation. As a consequence the TC holder does not need to develop the elements except for the case where the generic elements contained as published in the applicable CS are not sufficient enough to ensure the safe operation of the particular aircraft type.

    As a result the CS applicable to complex motor-powered aircraft will be different in concept from the CS applicable to aircraft other than complex motor-powered aircraft. The Agency will start the development of this latter category of CSs in 2009 and they will be the subject of dedicated NPAs.

43. For complex motor-powered aircraft, the process used by the Agency to approve the elements of an OSC is not specified in the rule, as it is an Agency certification procedure adopted by the EASA Management Board after consultation with the EASA Advisory

[11] New type means an aircraft type for which the TC is issued after a certain transition period following the effectivity date of the amendment to Regulation 1702/2003 resulting from this NPA (see also the Chapter IV. F Grandfathering and Transition measures).

Board[12]; however it is clearly the intention to base it on the existing OEB process. The existing OEB process is mainly applicable to large aircraft. It can, however, be adapted to the size and complexity of the aircraft type in case an element needs to be developed for an aircraft other than complex motor-powered aircraft. The final processes used by the Agency will be included in the Agency Certification Procedures[13]and will be published on the Agency's website.

44. The schematic in Appendix IV shows how the OSC fits in the general regulatory framework. Part-OPS, Part-FCL, Part-66, Part-CC and Part-OR mandate the use of the elements as approved under the OSC when an operator or training organisation develops a training programme or an MEL.

iii. Requirements for operators and training organisations to use the OSC elements:

45. As mentioned above, the elements approved under the OSC will be the mandatory basis for operators when developing their MEL and customised training courses for pilots, maintenance certifying staff and cabin crew. To establish this mandatory link between the OSC elements and the MEL and training courses, specific requirements are included in the applicable Implementing Rules (e.g. Part-FCL, Part-66, Part-OR, Part-OPS, Part-CC, Part-147 and Part-145).

46. Although the above links make specific references to the contents of the elements, which shall be established in accordance with Part-21, the contents of the elements is not included in Part-21 itself but they will be referred to in the OSC DS.

a. Flight Crew Licensing

The following links have already been included in the draft Part-FCL[14]:

(1) **'FCL.060 Recent experience':'** …(4) When a pilot has the privilege to operate more than one type of noncomplex helicopter with similar handling and operations characteristics, *as defined in accordance with Part-21*…';

(2) **'FCL.710 Class and type ratings Variants'**: '(a) In order to extend its privileges to another variant of aircraft within one class or type rating, the pilot shall undertake differences or familiarisation training, *as defined in accordance with Part-21*..';

(3) **'FCL. 725 Requirements for the issue of class and type ratings'**: '(a) Training course. An applicant for a class or type rating shall complete a training course at an approved training organisation. The training course shall be based on the training syllabi for the relevant class or type as established *in accordance with Part-21*…

… (4) For aeroplanes that are certified as high performance aeroplanes *in accordance with Part-21*, the examination shall be written and comprise at least 60 multi-choice questions distributed appropriately across the main subjects of the syllabus…';

(4) **'FCL.720.A Experience requirements and prerequisites for the issue of class or type ratings aeroplanes'**: 'An applicant for a class or type rating shall comply with the experience requirements and prerequisites for the issue of the relevant rating established *in accordance with Part-21*. In any case, those requirements and prerequisites shall be at least the following:…

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12 Article XX of the Basic Regulation

13 Current certification procedures are published under the link: http://www.easa.europa.eu/ws_prod/c/c_intwrkproc.php

14 Draft Part-FCL is included in EASA NPA 2008-17b: http://www.easa.europa.eu/ws_prod/r/doc/NPA/NPA%202008-17b.pdf

(b) Single-pilot high performance aeroplanes. Before starting flight training, an applicant for a first type or class rating for a single-pilot aeroplane that is certified as high performance aeroplane *in accordance with Part-21* aeroplane shall:…';

(5) **'FCL.720.H Experience requirements and prerequisites for the issue of type ratings helicopters'**: 'An applicant for a type rating shall comply with the experience requirements and prerequisites for the issue of the relevant rating established *in accordance with Part-21*. In any case, those requirements and prerequisites shall be at least the following…';

(6) **'FCL.720.PL Experience requirements and prerequisites for the issue of type ratings powered-lift aircraft'**: 'An applicant for a powered-lift type rating shall comply with the experience requirements and prerequisites for the issue of the relevant rating established *in accordance with Part-21*. In any case, those requirements and prerequisites shall be at least the following…';

(7) '**FCL.720.As Prerequisites for the issue of type ratings airships'**: '(a) An applicant for an airship type rating shall comply with the experience requirements and prerequisites for the issue of the relevant rating established *in accordance with Part-21'.*

b. Air Operations

Additional references and requirements for operators and training organisations will be included in the upcoming NPA containing the draft Implementing Rules for air operations. These requirements will be related to the development of the MEL, cabin crew type training and to the operator specific training courses (including operation on more than one type or variant, recurrent training and checking) for pilots.

Amendments to the draft Part-OR[15] contained in NPA 2008-22 are also going to be proposed in future NPAs which will contain the relevant certification specifications. These proposed amendments will contain instructions and guidance material for competent authorities, training organisations and operators on how to deal with the elements of the OSC (e.g. how the competent authority and training organisation shall base their training course on the minimum syllabus).

c. Maintenance certifying staff

The proposals for amending regulation 2042/2003 have interfaces with the proposal in NPA 2007-07. The latter NPA has already completed its consultation phase. The text resulting from the comment response document will be further amended to align with the outcome of the proposals related to the OSC.

Appendix II explains the proposed provisions amending regulation 2042/2003 to include references to the OSC.

iv. The use of Design Organisation Approvals in relation to OSC

47. A Design Organisation Approval (DOA) is not required for applicants for an OSC or SOSC. All Community holders of a TC for complex motor-powered aircraft however are already required to hold a DOA. They can choose to extend their DOA to obtain the privilege for approval of minor changes to the OSC. After the initial implementation of the OSC rules and when enough experience is gained with the different approval processes, the Agency will investigate whether there is a need to mandate DOA for OSC applicants.

[15] Draft Part-OR is included in EASA NPA 2008-22C

http://www.easa.europa.eu/ws_prod/r/doc/NPA/NPA%202008-22c%20-%20Part-OR.pdf

Question 1: Stakeholders are invited to comment on the possible requirement for all OSC applicants to extend their DOA to OSC aspects.

E. Transfer of JAR-26 into the Community regulatory framework: Safety Directives

48. The Basic Regulation requires, inter alia, the Implementing Rules to:

(a) reflect the state of the art and the best practices in the field of airworthiness;

(b) take into account worldwide aircraft experience in service, and scientific and technical progress;

(c) allow for immediate reaction to established causes of accidents and serious incidents;

Under these provisions, the Implementing Rules must address two situation categories:

- the requirements that in the JAA system were or would have been included in JAR-26 "Additional Airworthiness Requirements for Operations"; and
- the correction of shortcomings in OSC elements which are not directly linked to the aircraft design.

49. The proposed paragraph 21A.3C is introduced to provide the Agency with the legal tools to implement the above provisions of the BR.

In general, this new tool will allow the Agency to mandate certain requirements to holders of already issued certificates such as TC, STC, OSC and SOSC. Such requirements are generally included in an amendment to the applicable CS as a reaction to a safety problem that was not properly addressed in the CS before. The resulting change in the contents of the approval will then also be applicable to all the certificates issued by competent authorities other than the Agency, based on conformity with the Agency approval. For example, the owner of an aircraft with a Certificate of Airworthiness that was based on conformity with an Agency TC will have to comply with an SD that changes the contents of the TC. The mechanism is identical to the mechanism for Airworthiness Directives, which are issued in accordance with 21A.3B.

50. The different possibilities for Agency measures are summarised in a flow chart in the draft GM 21A.3C.

51. The intent of the provisions proposed in 21A.3C are explained in Appendix I.

i. The requirements that in the JAA system were or would have been included in JAR-26

52. When a new specification is introduced in a CS which contains an airworthiness code or specifications for approval of OSC elements, it is normally only applicable to new applications for approval. However, in some cases the new specification should also apply to certificates which have already been issued, to ensure an appropriate level of safety.

The provision related to the SD measure will be included in a new CS entitled "CS-26 Additional Airworthiness Specifications for Operations". This has several advantages. First of all, it means that all potential provisions which could be candidates for retroactive applicability will go through the Agency's Rulemaking Procedures. This enables stakeholders to comment on the contents of the measure, its scope and possible implementation periods. Secondly, it will simplify the SD process by allowing a simple cross-reference to the relevant CS paragraph(s). Finally, it will also allow an easier inclusion of the requirement in the certification basis for changed products.

Paragraph 21A.16A is amended to make clear that the Agency shall issue the CS-26.

53. For each new CS-26 amendment the Agency will determine whether it is practical for the certificate holder (TC, STC, OSC or SOSC) to comply with it or not. Some requirements can only be complied with by the certificate holder because they require re-evaluation of data that only the certificate holder owns. In other cases, compliance by the certificate

holder is not practical and the requirement to comply should be transferred to the operators/owners.

54. In the case where the TC, STC, OSC or SOSC holder is not the most appropriate entity to demonstrate compliance with the new CS-26 specification, an SD will be issued by the Agency containing or referring to (by referring to CS-26) the new specification in such a way that the operator or owner can directly comply with it. An example is the fireblocking requirement for aircraft interior materials. Cabin interiors of aircraft, certainly those of aircraft in service, are customised and usually not designed by the TC holder and therefore it would not be practical to require a design solution by the TC holder. The new certification specification can be included in an SD that will be mandatory for the affected owners/operators through the applicable requirements (see paragraph 64 below).

55. If the Agency has determined that it is practical for the certificate holder to demonstrate compliance with the new CS-26 specification, the Agency will notify the certificate holder accordingly.

56. Nevertheless, the certificate holder may demonstrate that the existing design or OSC elements already comply with the new requirement.

57. In any case, the Agency will record compliance with the new CS in the certificate data sheet.

58. In some cases the demonstrating of compliance may not lead to a design change but to changes in instructions for continuing airworthiness or OSC elements. In some cases, the Agency may not need to issue a SD because the applicable legislation already requires the operator to update its data regularly (e.g. maintenance programmes) or each time the reference data has been updated (e.g. MEL after an update of the MMEL). An example of this is the requirement to conduct Enhanced Zonal Analysis Procedure for Electrical Wiring Interconnection Systems. After a detailed evaluation, the Agency has decided that this provision of the new specifications in CS-25 amendment 5 should also be applicable to existing aircraft types. The TC holder is required to do the analysis which will lead to improvements to the Instructions for Continued Airworthiness (ICA). These ICA updates already need to be taken into account for the updating of individual maintenance programmes for the affected aircraft through a requirement in Part-M. It is therefore not necessary to impose the new requirement on the operators through the issuance of an SD.

59. Only when the review of compliance would necessitate a change in the design or to certain OSC elements of the aircraft, will the Agency issue an SD so that it becomes mandatory for the individual aircraft and operator of that aircraft (or training organisation providing training on the aircraft). An example is the possible[16] requirement to install fuel tank flammability reduction means (e.g. fuel tank inerting systems).

60. The current 21A.101, establishing the certification basis for changed products, allows reversion to old versions of the applicable CS for certain changes. The proposal is to supersede it with the CS-26 specifications which should be applicable to all changes. A new subparagraph in 21A.101 is therefore introduced to achieve this.

ii. Correction of shortcomings to the OSC

61. This category of SDs works in a similar manner to the ADs for airworthiness. In practice, it means a shortcoming in one of the elements of an OSC has been identified through in-service experience. The OSC holder is required to propose a corrective measure. If the Agency confirms that there is a serious safety issue ("unsafe operation") needing immediate action, it will make the corrective measure mandatory through the issuance of an SD with shorter timescales.

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[16] The Agency has not yet decided to make this requirement applicable to aircraft in service but because it is required in the US it can serve as a suitable example.

62. The Agency also proposes amendments to the reporting requirements in order to ensure that occurrences relevant to (S)OSC are reported to the OSC or SOSC holder. The necessary amendments to Part-OPS, Part-CC and/or Part-OR will be included in a separate NPA. Additionally, the Agency plans to amend the AMC 20-8 to introduce the OSC.

iii. Flexibility provision

63. Finally a general provision on deviations is included. Any person will be able to apply to the Agency for the approval of a deviation to the SD. This could range from alternative means of compliance to extension of compliance periods. Such requests need to be substantiated and shall achieve an acceptable level of safety.

iv. SD enforcement

64. The enforcement will be based on requirements in the Implementing Rules for continuing airworthiness (Regulation (EC) No. 2042/2003), operations (Part-OPS), cabin crew (Part-CC) and organisations (Part-OR). These requirements will mandate the implementation of applicable SDs by the affected person/organisation. This is similar to the current requirement in Part M (M.A.303) which requires the implementation of applicable ADs by owners/operators. The necessary amendments to Regulation (EC) No. 2042/2003 and to Part-OPS, Part-CC and Part-OR as well as their AMC and GM are included in this NPA.

F. Grandfathering and Transition measures

65. Transition measures for the entry into force of the OSC provisions will be established in the cover regulation of Part-21. These transition measures shall take into account the time needed for preparing their implementation, as well as the possibility to grandfather existing aircraft operated by Community operators - the training programmes and MELs which are already approved.

66. The grandfathering provisions of existing approvals in the field of air operations and flight crew licensing will be included in cover regulations of Part-OPS, Part-FCL, Part-CC and Part-OR and they will therefore be consulted on through the relevant NPAs.

67. Proper correlation between the two transition measures can therefore only be elaborated when more is known about the exact content of the final rules and of their impact. The final Agency's proposal for transition measures will only be included in the final Agency's Opinions.

68. Additionally, in NPA 2007-07, the Agency has already proposed transition measures for the new provisions in Part-66 regarding the type training of maintenance certifying staff. The relationship between the proposed option in this NPA and that in NPA 2007-07 is further explained below.

69. Since the Implementing Rules for airworthiness[17], were issued it has been possible to grandfather existing national TCs as they were issued using national rules that were very close to those introduced in the Implementing Rules. The national certificates were based on the same legal concept as the one underpinning the Implementing Rules. For the OSC this is not the case as no equivalent national approvals based on a common concept exist. Therefore, the automatic grandfathering of existing approvals for OSC as for TCs will not be possible.

70. The only "approval" that is close to the approval concept of the OSC is the JOEB report. Therefore, the Agency will propose automatic grandfathering of existing JOEB reports as elements of the OSC. However, a JOEB report is not available for all aircraft types operated by Community operators. Moreover, not all JOEB reports contain a uniform set

[17] See footnote 1

of data and no JOEB reports contain a syllabus for maintenance certifying staff type rating training. Nevertheless, as advised by the rulemaking group, every attempt will be made to address this by means of a simple mechanism to determine the OSC which is applicable to each existing aircraft type as this was done for the TC. This could be achieved by automatically issuing an OSC containing the existing elements of JOEB reports. If no JOEB report exists, or the existing JOEB report does not contain all the necessary data for one or more of the elements, the OSC could only provide references to the applicable CSs instead of the approved element(s). An advantage is that even though the OSC would not contain any or all approved elements, operators will be able to apply for an SOSC. Another advantage is that if an unsafe operation exists in relation to the OSC, the Agency would be able to issue an SD obliging certificate holders and operators to comply with the content of that SD or to propose corrective actions to restore an acceptable level of safety.

i. Options for transition measures

71. To complete the OSC with the missing elements as described above, various options are envisaged:

a. Voluntary catch-up;

b. Mandatory catch-up of all existing types;

c. Mandatory catch-up limited to existing aircraft as long as they are still in production.

ii. Consequences for TC/OSC holders

72. The consequences for the TC/OSC holders of the above options are self-explanatory. The greater impact would be created by option 'b', followed by option 'c'. Option 'a' would have very little impact if any at all.

iii. Consequences for organisations in the fields of air operations and flight crew licensing

73. First of all and as already explained above, it is important to note that existing operators and organisations' certificates are not affected by the new OSC concept, unless otherwise specified in the transition measures of the cover regulations of the applicable Implementing Rules (e.g. Part-FCL, Part-OPS, Part-CC and Part OR). If no change is introduced in the conditions for their initial approval, they will not be obliged to comply with the OSC elements. However, for new applications (e.g. new operators, new training organisation, first introduction in the fleet) for existing aircraft, the applicants will be obliged to use approved elements for developing the necessary MEL and training courses.

For the operator the consequences can then be explained for the cases where an approved element in the OSC already exists compared to those cases where an approved element in the OSC does not already exist:

a. If there is an approved element, either grandfathered from a JOEB report, introduced in the OSC through mandatory or voluntary catch up or, for new types, approved under the OSC in accordance with Part 21 Subpart C, the operator must use this element as the basis for developing its own MEL or customised training course. The operator can deviate from or change the minimum only after having obtained an SOSC issued by the Agency to cover this deviation.

b. If there is no approved element, the operator becomes the responsible entity to ensure that the relevant element(s) is (are) approved before developing its MEL or training courses. There are various options for obtaining approved elements:

- The operator can request the OSC(TC) holder to apply for voluntary catch up;
- The operator can also submit an application for the approval of the necessary elements under an SOSC;

- The operator can use an SOSC developed by another operator or third party if it is for the same aircraft type or variant.

The absence of approved elements will make the operator responsible for the developing those elements and for ensuring approval by the Agency.

iv. Consequences for organisations approved in accordance with EC Regulation 2042/2003

74. The transitioning and possible grandfathering of type training courses for maintenance certifying staff differs from the other elements of the OSC for two reasons.

First of all, none of the JOEB reports have so far included the minimum syllabus for type training of maintenance certifying staff so the intended grandfathering of these JOEB reports will not lead to grandfathered minimum syllabi.

Secondly, the transitioning of the minimum syllabus into the OSC concept will coincide with the implementation of the amendments to Part-66 resulting from NPA 2007-07. Notably this will complicate the transitioning as the Agency intends to respect the agreement made in the discussions around NPA 2007-07 relative to the minimum syllabus, minimum duration and the mandatory updating of existing training courses in line with this minimum syllabus and minimum duration.

The following mechanism is therefore proposed:

The intention of the Agency is to align the end of the transition period for NPA 2007-07 with the end of the transition period for the NPA on the OSC.

Type rating courses approved before the end of the transition period will have to be amended in accordance with the outcome of NPA 2007-07. This will be a condition for the courses to be considered "grandfathered" for the purpose of the OSC.

These courses will not need to be further amended even if the OSC elements are issued after the transition period unless:

- a Safety Directive states differently; or
- the organisation decides to amend the course on a voluntary basis;

New courses developed after the transition period:

- For new aircraft types the syllabus for maintenance certifying staff type rating training is available in the Operational Suitability Certificate Data Sheet (OSCDS). When the training organisations applies for approval of a course, this syllabus shall be used as the basis;
- For existing aircraft types:
    - When the OSC contains an approved syllabus for maintenance certifying staff type rating training (TC holder has decided to catch up), the training organisations shall use this as the basis for its training course;
    - When the OSC does not contain an approved syllabus for maintenance certifying staff type rating training for the aircraft type considered (no catch-up), the training organisation will need:
        - to apply for an SOSC and obtain approval for a syllabus for maintenance certifying staff type rating training; or
        - to use the approved syllabus for maintenance certifying staff type rating training of an SOSC which is held by another training organisation.

v. Proposed option

75. After due consideration of the various consequences, taking into account existing practices and responsibilities, the rulemaking group has expressed a preference for

option *a*: i.e. voluntary catch-up by the OSC holder. Nevertheless, the Agency would like to know the view of the various stakeholders about this option and other options.

76. As already explained, the consequences of option *a* on operators and training organisations are obvious as it makes them responsible for the existing aircraft and for getting the elements of the OSC approved by applying for supplemental OSC unless the OSC holders or someone else would have applied for such an approval. The consequences of the other options on operators and training organisations will also depend on the time they are given to comply with the approved elements of the OSC.

Question 2: the Agency would like to know stakeholders' opinion on the preferred option, their preferred option for transition measures and the length of the transitional period needed.

V. Regulatory Impact Assessment

77. The Regulatory Impact Assessment for this NPA can be found in Appendix VI to this explanatory note.

Appendix I Explanatory Memorandum for proposed amendments to Regulation (EC) No. 1702/2003

A. Safety Directives

78. Regulation 1702/2003 article 1

The amended article contains the definition of Safety Directives (SD). This definition is not positioned in Part-21 in order to improve the readability and logic of the new paragraph 21A.3C dealing with SDs. The definition covers all possible SDs as discussed in section IV.E of the explanatory note. The legal form of the SD will be a decision by the Agency addressing the holder of the relevant certificate, introducing a mandatory amendment to the certificate, which then becomes applicable to all certificates that are based on the affected approval such as MELs, training courses or certificates of airworthiness.

79. 21A.3C Additional airworthiness specifications for operations and safety directives

The new paragraph 21A.3C is divided into three sections:

- Subparagraphs (a) through (f) deal with imposing additional airworthiness specifications for operations to existing types and the issuance of SDs for reacting to general safety problems (former JAR-26 items);
- Subparagraphs (g) and (h) deal with corrections to existing OSCs or SOSCs; and
- Subparagraphs (i) and (j) are applicable to all SDs.

80. Reacting to general safety problems

It should be noted that these provisions do not always lead to the issuance of an SD.

Subparagraph (a) specifies when the holder of an affected certificate will have to demonstrate compliance with new specifications. The certificate holder will be informed individually if this provision is applicable and the obligation to comply is therefore effective.

Subparagraph (b) indicates clearly that the Agency will verify the compliance demonstration by the certificate holder in accordance with subparagraph (a). When the Agency is satisfied that compliance with the relevant additional airworthiness specifications for operations is demonstrated it will approve this demonstration of compliance.

When compliance with the additional airworthiness specifications for operations can only be achieved by a change in the approved design or a change to the elements of the OSC, subparagraph (c) allows the Agency to issue an SD so that the change becomes mandatory for each holder of a certificate (aircraft owner, operator, training provider) which is based on the affected TC, STC, OSC or SOSC. The SD is considered a mandatory amendment to the TC, STC, OSC or SOSC.

Subparagraph (d) obligates the holders of the TC, STC. OSC or SOSC for which certificate an SD is issued to make the information which is necessary for compliance with the SD, available to each person or entity that is required to comply with the SD.

Subparagraph (e) stipulates that, when compliance with the additional airworthiness specifications for operations is shown, regardless of whether this has lead to an SD or not, it will be recorded in the relevant data sheet.

Subparagraph (f) explains that the Agency can also issue an SD without direct involvement of the holder of the affected TC, STC, OSC or SOSC. This is the case when it is not practical for the holder of the certificate to demonstrate compliance. The SD will then contain or refer to the additional airworthiness specifications for operations which will become mandatory for the aircraft owner, operator or training provider.

81. Corrections to already issued OSC or SOSC

Subparagraph (g) specifies the conditions under which the Agency will issue an SD to correct a deficiency in an existing OSC or SOSC.

In case the Agency needs to issue an SD in accordance with subparagraph (g) the holder of the relevant OSC or SOSC must propose measures to correct the deficiency in the OSC or SOSC. It must also make the information which is necessary for compliance with the SD, available to each person or entity that is required to comply with the SD.

82. General SD provisions

Subparagraph (i) stipulates the minimum contents of any SD.

Subparagraph (j) provides for the possibility to apply for the approval of a deviation to any SD. The Agency will approve such deviation if it provides an acceptable level of safety.

B. New Subpart C: Operational Suitability Certificates

83. The procedural requirements for approval of the elements in the OSC are similar to those for a type certification process, as described in Subpart B of Part-21. The rules for this process are therefore envisaged in a new Subpart C in Part 21. A detailed explanation of the individual paragraphs in the new Subpart C follows below.

84. Regulation 1702/2003 article 1

The scope of the regulation will be extended to cover the OSC

The amended article will also contain the definition of OSC.

85. Regulation 1702/2003 article 4b

The new Subpart C of Part 21 will not contain the requirement for TC holders to obtain an OSC. As for other basic requirements this is included in the cover regulation of the amended Regulation 1702/2003, notably in the new article 4b. The reason for splitting this article into two paragraphs dealing with complex motor-powered aircraft on the one hand and aircraft other than complex motor-powered aircraft on the other, is mainly because it is expected that the grandfathering and transition provisions for these two categories of aircraft differ. These grandfathering and transition provisions are not presented here in detail but are discussed in a separate section IV.F in the explanatory note. Provisions to address this issue will be presented in the Comment Response Document based on the comments received to the present NPA.

86. Part-21 Subpart C

Subpart C details the procedural requirements for obtaining an OSC and SOSC and the requirements stipulating the responsibilities and rights of the applicants for and holders of the (S)OSC. It is important to note that Subpart C does not contain the technical standards for approval of the elements of the OSC. These will be contained in the relevant CSs which are currently being developed.

87. 21A.62 Scope

Subparagraph (a) defines the mandatory contents of the OSC: what are the elements that are to be approved under the OSC. This list of elements is derived from the listing in the BR article 5(5)(e)(iv) through (vi). In principle, all of these elements shall be established by the applicant and presented for approval to the Agency, except that as explained in the GM No. 1 to 21A.62(b), in some cases not all elements are required. This is covered by the words "when applicable".

The proposed concept of minimum syllabus in AMC 21A.62(b) is the best compromise the Agency could reach, taking into account the opinions of the different interested parties. The proposal contains the notions of pre-requisites or previous experience and knowledge and the concept of minimum duration. Although these notions apply differently to pilots and maintenance certifying staff, they have been generalised. In the case of the

minimum syllabus for maintenance certifying staff, the notion of pre-requisites may not always be applicable but it is a critical element for the development of the training need analysis. On the other hand, the notion of minimum duration for the syllabi for pilots is very much linked to the pre-requisites requirements as well as to the proposed training tools/devices. The minimum duration is part of the reference outline course (the training course used for the OSC evaluation) which specifies the elements to be trained and associated training methods, tools and training devices. To enable flexibility, the Agency will establish the maximum variation possible from the reference outline course in the applicable OSC data sheet. This will allow operators and training organisations to make variations from this minimum duration in their training courses. These variations are based on the student pre-requisites. When these variations are within the limits established by the Agency, there would not be a need to apply for an SOSC to the Agency. A reduction of the minimum duration, within the maximum variation established by the Agency, could therefore be possible when using more advanced training devices, methods or tools. Any variation outside the limits established by the Agency in the applicable OSC data sheet would require a change to OSC by the OSC holder or an SOSC by others than the OSC holders.

Additionally, it is also important to highlight that without the concept of minimum duration in the minimum syllabus it would have been very difficult to assess the differences training between aircraft types or variants with the view to obtain credits based on similarities.

Last but not least, operators' and training organisations' competent authorities are still responsible for the approvals of the customised training courses.

88. 21A.64 Eligibility

The provisions under this paragraph means that only the TC holder/applicant can apply for an OSC for the aircraft type

Once the OSC for a specific aircraft type is issued by the Agency (or adopted by law under grandfathering provisions), other legal entities can then apply for the approval of a change or supplement to this OSC under an SOSC.

89. 21A.65 Application for Operational Suitability Certificate and Supplemental Operational Suitability Certificate

Subparagraph (a) indicates that the Agency will further define, in its certification procedures, how it expects to receive OSC applications. This is similar to other fields where the Agency conducts certification processes. These procedures are likely to require application by means of a form and will include instructions on how to complete and submit such a form.

Subparagraph (b) requirements the applicant to indicate the types of operations for which he requests approval of the OSC elements. At the request of the applicant, this can include specific operations, such as Extended Twin Engine Operations (ETOPS). The elements proposed will then have to address all of these possible operations. This subparagraph also requires the applicant to provide the Agency with all of the substantiation data necessary to show compliance with the applicable CS.

In case of an application for the approval of a change (see 21A.80), only the information related to the change needs to be provided.

90. 21A.66 Certification Specifications for Operational Suitability

This paragraph provides confirmation of the Agency's obligation to develop CSs to be used in the certification process (consistent with Article 19 of the Basic Regulation). It mirrors the similar provision for the airworthiness codes in 21A.16A, but is tailored to the need to develop the CSs necessary for approval of the elements of an OSC. Therefore, it does not only refer to Annex I of the BR (Essential Requirements for airworthiness), but

also to Annex III and IV (Essential Requirements related respectively to pilot licensing and air operations).

91. 21A.67 Designation of Operational Suitability Certification basis

As soon as the applicant for an OSC has formally filed its application, the Agency shall notify the applicant which CSs are applicable for approving the elements: the operational suitability certification basis. These will normally be the relevant CSs which are applicable at the date of application.

However, in coordination with the applicant the Agency can also accept deviations to this general principle:

- (a)(1) allows the use of alternative specifications to those established in the applicable CS. This concept is necessary to allow deviations from the CS in unforeseen exceptional cases.
- (a)(2) provides for additional flexibility for the applicant to comply with changes to the applicable CS which might arise after the OSC application has submitted.

Subparagraph (b) allows the Agency to add ad-hoc specifications (in type certification these are referred to as "special conditions") . If the applicable CSs are not fully appropriate for addressing the specific aircraft type, the Agency can then prescribe alternative or additional ad hoc specifications. This could be the case when the type has novel or unusual design features, its intended use is unconventional or in service experience of aircraft of similar design reveals unsafe operations. The latter case is mainly to include specifications that are also applied through an SD on an existing OSC. It will prevent having to issue an SD immediately after having issued the OSC. Before imposing the ad hoc specifications they could be subject to a short public consultation as is done for special conditions in type certification.

92. 21A.68 Compliance with the operational suitability certification basis

This paragraph states that the OSC applicant is responsible for demonstrating that the elements comply with the operational suitability certification basis. To allow proper involvement of the Agency in the process of demonstrating compliance a certification programme is needed to explain how the applicant intends to demonstrate compliance and to provide a schedule for the activities.

When the applicant is convinced that the elements comply with the operational suitability certification basis, it is expected to make a statement to confirm compliance to the Agency. This does not imply that the Agency is obliged to accept such a statement without further verification/evaluation. The Agency will have the possibility to verify that the elements are in compliance with the operational suitability certification basis (see 21A.69).

93. 21A.69 Issue of the Operational Suitability Certificate

This paragraph explains when the Agency will issue the OSC. Deviations from the applicable specifications will be allowed providing there are compensating factors enabling an equivalent level of safety.

Subparagraph (d) clarifies that there is some flexibility in issuing the OSC even if some of the elements are not fully ready. In such cases, the Agency may issue the OSC with certain limitations. This could happen when a new aircraft type is used for demonstration flights for the first Community customer. In that case, the pilot(s) must be able to have the type rating endorsed in their license(s) but it may not be necessary to have the cabin crew trained yet. Therefore, the element related to cabin crew training could be absent at the initial OSC issuance. The limitation will then be to only conduct flights without passengers.

94. 21A.70 Issue of the Operational Suitability Certificate for aircraft other than complex motor-powered aircraft

As explained above in paragraph 42 of the explanatory note, the conditions for issuing OSC for aircraft other than complex motor-powered aircraft are significantly different from those for complex motor-powered aircraft.

For aircraft other than complex motor-powered aircraft the Agency will develop dedicated CSs that will contain generic OSC elements, to be used by the operators. These generic elements may be applicable to a whole class or a group of products. For example, if the aircraft is in a group of aircraft for which a maintenance certifying staff group rating is issued, a CS containing the group rating training syllabus issued by the Agency is normally applicable to this aircraft.

In most cases, the generic training syllabi and MMEL will be sufficient for establishing the training and MEL respectively by the operator while ensuring safe operation. In such occasion the applicant for OSC will only need to make a statement that this is the case and the Agency will issue the OSC.

Only in cases where the generic elements are not sufficient because the aircraft has specific features which are not addressed by these generic elements, then the applicant will have to propose elements for Agency approval. It is also possible for the applicant to elect for this option.

95. 21A.71 Operational Suitability Certificate

This paragraph explains what the contents of the OSC are. This should be understood as what exactly is approved by the Agency, and not only what is written on the certificate that is issued at the end of the approval process.

The main contents of the approval are the elements as required by 21A.62(b) and the types of operations. The approval covers only what is required in the applicable CS-ses for these elements. Any further information provided by the OSC holder in the documents that are made available to operators is not considered approved.

Any conditions or limitations resulting from the approval process are also considered part of the OSC.

The OSC DS will be the record of what is approved under the OSC and of possible limitations or conditions; it is an integral part of the OSC.

Finally, all the changes proposed by the OSC holder and approved by the Agency or by its DOA are also considered to be part of the OSC.

96. 21A.73 Occurrences

The OSC holder, which is also the TC holder, will receive reports of occurrences with the aircraft covered by the OSC from operators. New requirements in the applicable Implementing Rules for air operations and organisations to report OSC related occurrences will be introduced to achieve this. The OSC holder shall determine whether these occurrences result from a shortcoming in any of the approved elements of the OSC. If that is the case, the OSC holder must investigate the occurrence further and analyse if the shortcoming in the approved element can lead to unsafe operations. It shall then report to the Agency what it intends to do to correct the shortcoming and whether it is necessary for the Agency to issue an SD in accordance with 21A.3C (see explanation above in section IV. E. ii).

The difference of this requirement with the one in 21A.3 is that the OSC holder is neither required to set-up a system for collecting, investigating and analysing data from occurrence reports nor to extend the one which is already required by 21A.3(a). Nevertheless, the OSC holder is required to investigate occurrences when it is determined that there is a link with the OSC. In the future all such requirements for occurrence reporting systems will be part of the integrated management system of the organisation.

97. 21A.75 Record keeping

The OSC holder is required to keep all the information that was necessary to show compliance of the elements with the operational suitability certification basis as long as the aircraft type is used by a Community operator. The purpose of this is to be able at any time to investigate the reason for an occurrence that relates to the OSC elements and to propose corrective actions. Finally, the Agency should have access to this information when it considers necessary for oversight purposes.

98. 21A.76 Documents

The elements approved under the OSC shall be made available to any person required to comply with them. These are the operators or training organisations that need to develop pilot type rating training programmes, operators or training organisations that need to develop cabin crew aircraft type-specific training programmes, maintenance organisations or Part-147 approved organisations that need to develop maintenance certifying staff type rating training programmes and operators that need to develop MEL. The relevant documents must be made available to those organisations at their request.

99. 21A.77 Transferability

The OSC can only be transferred to another person together with the TC. The TC holder and the OSC holder shall always be the same person. The same applies to supplemental OSCs that are linked to an STC. Other SOSCs can be transferred to any person who is prepared to take the associated responsibilities.

100. 21A.78 Duration and continued validity

The OSC is issued for an unlimited duration; it can only become invalid by means of a formal decision of the Agency. This can be done in a case where the OSC holder is no longer complying with the applicable requirements. When there is a safety issue the initial Agency reaction will normally be the issuance of an SD.

101. 21A.79 Classification of changes

Changes to the elements of an OSC must also be approved. In order to determine the possible approval route changes need to be classified in minor or major. The basic definitions of major and minor are in this paragraph. There will be detailed guidance material providing classification criteria or examples for the various elements. The GM included in the present NPA contains only examples for the classification of minor and major changes for MMEL. GMs containing the examples for the classification of major and minor changes to other elements of OSC will be included in the relevant NPAs containing the draft certification specifications, as it is not possible to properly reflect what could be a minor or major change to these elements until they are properly defined. As the applicable CS-ses are still under development, their contents is not yet mature for public consultation. The proposed classification criteria for major or minor changes to the MMEL are based on the ones already established for changes to AFM. However, some alignments with the latest propose amendments (NPA 16/2006) have not been included. Consistency with the final results of NPA 16/2006 will be subject of a separate NPA.

102. 21A.80 Approval of changes proposed by the holder of the operational suitability certificate

Changes to OSC elements proposed by the OSC holder are considered to become part of the OSC when they are approved.

Major changes shall always be approved by the Agency. Minor changes can be approved by the Agency or by an appropriately approved Design Organisation Approval (DOA) holder. The requirements in Subpart J for DOA are amended to address this extension of the privilege to classify changes and approve minor changes to the OSC.

The approval requirements are the same as for the approval of the initial OSC, however the application and necessary information only needs to address the change.

103. 21A.81 Changes approved under a supplemental operational suitability certificate

Persons other than the OSC holder can also, or in some cases must[18], propose changes to the OSC elements. These changes will always be approved by the Agency.

The approval process is similar to the approval process for the initial OSC with slight variations as stipulated in the paragraph.

104. Subpart J – Design organisation approval

As indicated in section IV. D. iv of the explanatory note, the requirements related to DOA are amended to take into account the possible privileges to classify changes and approve minor changes to the OSC. In addition, a dedicated AMC is developed for organisations applying for these privileges.

[18] If an STC affects one or more elements of the OSC. For the modified aircraft the STC holder/applicant must apply for an SOSC addressing these affected areas.

Appendix II Explanatory Memorandum for proposed amendments to Regulation (EC) No. 2042/2003

105. Regulation (EC) 2042/2003 needs to be aligned with the introduction of the OSC and the SD. The proposed changes to this regulation can be divided in three subjects:

106. Introduction of the OSC concept

As indicated in section A.IV.D.iii., the OSC concept must be introduced into Part-66 which currently contains the requirements for the establishment of training courses for type training of maintenance certifying staff. Paragraph 66.A.45(g) is amended to make the minimum syllabus as approved under the OSC, the mandatory basis for type training courses.

It should be noted that because the structure of the paragraph regarding type training is completely changed by the proposals of NPA 2007-07, it is decided to use the text of this NPA as the basis for introducing the Operational Suitability Certificate concept. This will improve the compatibility of the two proposals. As explained in the section A.IV.F., the opinions resulting from both this NPA and the NPA 2007-07 will be made compatible to have consistent rules and compatible transition provisions.

107. SD enforcement

As indicated in section A.IV.E.iv., to close the loop of the SD concept, provisions in other Parts than Part-21 are necessary to allow for the enforcement of SDs.

Part-M, Part-145 and Part-66 are amended in various paragraphs to add the SD each time there is already a reference to Airworthiness Directives (ADs).

A specific amendment to 145.A.35 is proposed to ensure that certifying staff, working in a Part-145 approved organisation, will also comply with SDs.

108. Occurrence reporting to support the continued validity of the OSC or SOSC

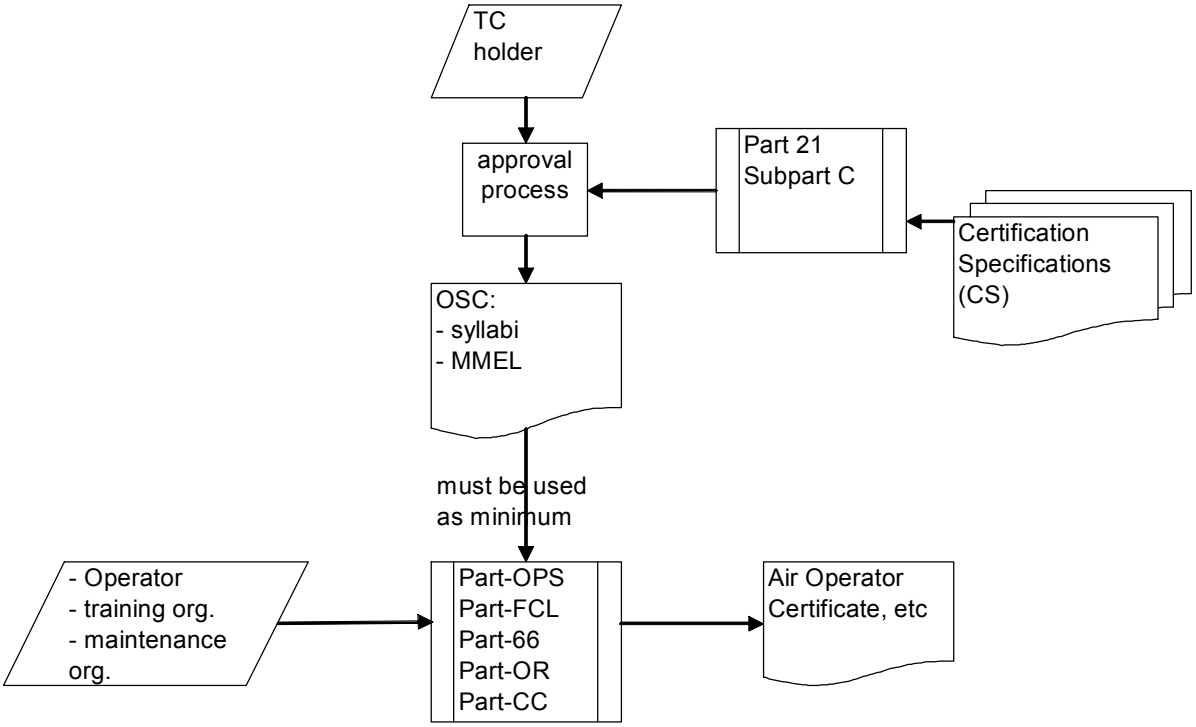
The OSC holder is responsible for investigating occurrence reports that are related to possible deficiencies in the OSC. In order to make sure that persons and organisations with maintenance responsibilities also report possible deficiencies in OSC elements to the holder of the OSC or SOSC, a new subparagraph is added to M.A.202.

Appendix III Explanatory Memorandum for additional requirements to Part-OR, Part-OPS and Part-CC

109. As already explained in section IV.E, by having these requirements in the applicable Implementing Rules, operators and training organisations are responsible for implementing the content of the SD. The proposed amendments to draft Part-OR, future drafts Part-OPS and Part CC is intended for the implementation of the Safety Directives issued by the Agency. The relevant paragraphs' numbers will be added when issuing the Agency Opinions.

Appendix IV Operational Suitability Certification Flow chart

110. Description of the flow chart: The TC holder obtains approval of the OSC elements in accordance with requirements in Part-21 Subpart C. The technical standard for the elements are in the different CSs which will be established by the Agency through a rulemaking activity. The output of this approval: the approved OSC elements will have to be used by the operators and training organisations as the basis when developing MEL and type training courses. The requirement for this will be in the relevant Implementing Rules (e.g. Part-OPS) etc.



Appendix V CS-MMEL Table of Contents

EASA Certification Specifications for Master Minimum Equipment List

CS-MMEL

AMC MMEL 150(a)(2)	Items required for Emergency Procedures
AMC MMEL 150(a)	Safety level
GM MMEL 150(a)	Event
AMC MMEL 150(b)	Maintaining the Level of Safety
GM MMEL 150(b)	Essential requirements for air operations relevant to MMEL
AMC MMEL 155	Justification of MMEL items

GENERAL ACCEPTABLE MEANS OF COMPLIANCE

Annex A to Book 2 MMEL policy

Appendix VI Regulatory Impact Assessment

Regulatory Impact Assessment

1. Introduction

1.1 Introduction for the RIA related to the OSC.

According to the Rulemaking Procedure of the Agency, a full regulatory impact assessment (RIA) is a mandatory part of any NPA. However, the development of the RIA for this rulemaking task 21.039 has presented particular difficulties.

First of all, it was apparent that development of a full RIA for this task would have had limited value: the choice whether or not rulemaking was the preferred option to address the subject had already been made by the legislator. This means that the standard method of comparing the impacts of all options with the "zero-option" (doing nothing) has limited value and it is not relevant at this stage.

Secondly, most of the rulemaking options identified and evaluated in the early stage of this rulemaking task had to be rejected because they were either not compliant with the BR or unacceptable to the industry members of the rulemaking group. Further elaboration of the impacts of these rejected options would not be very helpful.

Thirdly, although the concept of OSC is based on the JOEB process, they neither have the same scope (e.g. the JOEB did not address the syllabi for maintenance certifying staff) nor the same status (OSC is mandatory while JOEB was not). As JOEB evaluations were not systematic and none of them were addressing the same issues as the OSC elements an extrapolation of the experience with the former JOEB would not have been very representative for determining the impacts of the OSC. Therefore it is very difficult to make accurate predictions of some of the economic impacts.

Finally, to make a full RIA, the magnitude of most of the impacts should be evaluated and balanced depending on the exact transition and grandfathering measures for the new rules. As explained in section V of the explanatory note there are various options for the transition from the existing process to the Community rules for OSC. The final Agency proposal for the transition measures will only be made after the review of the comments and answers to the specific questions requested in this NPA. Some of the effects of these transition options on the impacts of the proposed rules are discussed in the same section V. This will allow the stakeholders to carefully evaluate the possible options.

As a result of the above difficulties the RIA as described below concentrates on the expected impacts of the preferred rulemaking option as proposed in this NPA and is mostly of a qualitative nature.

1.2 Introduction for the RIA related to the SD.

Similar to the RIA for the OSC rules a full RIA for the SD rules would have limited value because the decision that rulemaking is necessary was already taken by the legislator. However, for the SD there is a more important reason not to develop a RIA at all in this NPA:

The SD rules by themselves will not create obligations for certificate holders. They only implement the power already given to the Agency in the BR to restore the level of safety when a deficiency exits in one or more certificates issued by the Agency or to react to general safety problems. For instance, when the Agency has determined that it is necessary, for the benefit of safety, to make a certain amendment to the certification specifications also applicable to existing designs and not only to new designs, it will use the provisions of the SD rules. As explained in section A.IV.E of the explanatory note, in many cases the process will start with an amendment to CS-26. Such amendment will

be introduced using the Agency Rulemaking Procedure which means that an NPA will be produced for each new case. Each of these NPAs will contain a dedicated RIA. In other cases, the Agency will use the SD to restore the level of safety of one of the elements of the OSC (e.g. as per result of a serious occurrence).

It is impossible to predict the use of the new SD provisions because the decision to use them will be based on safety information and risk assessments. Therefore, a general RIA regarding the SD rules is neither considered appropriate nor necessary at this stage.

2. Purpose and Intended Effect

2.1 Issue which the NPA is intended to address.

The Basic Regulation 216/2008 introduced new provisions in article 5(5)(e) tasking the Commission to issue measures supplementing article 5 by stipulating conditions for the issuance of certificates for products. These new provisions are

'(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 appropriated and additional airworthiness specifications for a given type of operations to ensure compliance with Article 8;'

The intent of these new provisions is to allow the Agency to approve the aircraft type related training requirements, the aircraft type related minimum equipment list and the aircraft type related additional airworthiness specifications for a given type of operations, so that these will become the minimum standard for all users of this aircraft type in the EU. This will support the establishment of a high uniform level of civil aviation safety in Europe, which is the principal objective of the BR in accordance with its article 2.

2.2 Scale of the issue.

Although the proposed rules will affect many stakeholders, as identified below, the intent is to continue as much as possible with existing processes, for those elements already existing, thus limiting the impact.

2.3 Brief statement of the objectives of the NPA.

In accordance with article 19(1) of the BR this NPA contains the proposals by the Agency in order to assist the Commission in the adoption of the Implementing Rules for the above provisions of article 5.

3. Options

3.1 The options identified.

The options regarding the transposition of JOEB in the Community regulatory context are identified described below.

3.1.1 Option 1: Do nothing

JOEB remains a process without legal basis, which means that after closing the JAA the only way for the Agency to manage the process, would be as a service to industry and NAAs. The output of the JOEB is not mandatory and therefore European standardisation and uniform implementation of the outcome of the JOEB would not be possible.

This option would not be in line with the BR as it could not be ensured that the product will comply with Article 5 of the BR.

3.1.2 Option 2: Voluntary attachment to the Type Certificate Data Sheet (TCDS)

The elements to be approved are attached to the TCDS by the Agency after a voluntary approval process. The approval of the elements is not included in the application for the TC, but the approval process (Operational Evaluation Board, 'OEB') is initiated on a voluntary basis (not necessarily by the TC holder) and the output of this process is attached to the TCDS by the Agency. This means that the validity of the TC is not dependant on the availability of approved elements. Nevertheless an obligation in the Implementing Rules applicable to operators and training organisations (Part-OPS[19], Part-FCL[20], Part-66[21] , Part-CC[22] and Part-OR[23]) for Community operators[24] to use the elements as approved under Part 21 will be the mechanism to ensure that the elements are approved before operations can start. It means that there is only an indirect requirement for the TC holders to produce the necessary data and to obtain approval of this data by the Agency.

This option would not satisfy the need to ensure that new aircraft are provided in time with all the information, data and instructions, necessary for safe operation. It would also allow that not only the TC holder could propose an amendment to the TCDS but also anyone else. This would be against the principle that the TCDS reflects the approved contents of the TC as issued to the TC applicant.

The approval of the elements would not be a condition for the issuance of a certificate and therefore this option is not in line with the BR.

3.1.3 Option 3: Voluntary inclusion in the TC

The elements to be approved are selected by the applicant of the TC and are included in the TC application on a voluntary basis. This is similar to the way compliance with the airworthiness requirements for all weather operations (contained in CS-AWO) is shown today.

If the elements are not included in the application and subsequently not in the TC, operation by Community operators will not be possible due to a requirement in Part-OPS, Part-FCL, Part-66, Part-CC and Part-OR that mandates the use of the approved elements as basis for training programmes and MELs. The type certification basis established by the Agency will include the appropriate Certification Specifications (CS) that are applicable to the elements included in the application. These CS contain the standards that are used by the Agency for approving the elements. The approved elements are included in the TC, but are not needed for keeping the TC valid: if there is non-compliance with the CS for a particular element and the approval of this element is

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19 The contents of Part-OPS (Implementing Rules applicable to Air Operations) is included in the Notice of Proposed Amendment (NPA) NPA 2009-XX to be published by the Agency on its website in the next few weeks.

20 The contents of Part-FCL (Implementing Rules applicable to Flight Crew Licensing) is included in the NPA 2008-17 published by the Agency on its website on 05 of June 2008.

21 Part-66 is Annex III to European Commission Regulation (EC) 2042/2003:

http://eur-lex.europa.eu/LexUriServ/site/en/oj/2003/l_315/l_31520031128en00010165.pdf

22 Part-CC (Implementing Rules Applicable to cabin crew) is included in the Notice of Proposed Amendment (NPA) NPA 2009-XX to be published by the Agency on its website in the next few weeks.

23 The contents of Part-OR (Implementing Rules applicable to Organisations and their Management Systems) is included in the Notice of Proposed Amendment (NPA) NPA 2008-22c published by the Agency on its website on 31 of Octobers 2008 and NPA 2009-XX to be published by the Agency on its website in the next few weeks.

24 For ease of reading the term "operators" is used here, which includes not only air operators but also all the other entities that will have to use the approved elements such as training organisations and maintenance organisations.

invalidated, the TC will be limited (to particular types of operations, to a limited number of flight hours or cycles, etc.).

The results of the approval are also included in the TCDS like for option 2. Similar to option 2 the validity of the TC is not dependant on the availability of approved elements. Nevertheless an obligation in Part-OPS, Part-FCL, Part-66, Part-CC and Part-OR for European operators to use the elements as approved under Part 21 will be the mechanism to ensure that the elements are approved before Entry into Service (EIS) by a Community operator. It means that there is only an indirect requirement (through the operators of their products) for the TC holders to produce the necessary data and to obtain approval.

This option was rejected by the rulemaking group as it put too much burden on the existing TC approval process.

3.1.4 Option 4: Operational Suitability Certificate (OSC)

The elements to be approved are included in an approval (OSC) which supplements the TC. Such OSC will be considered a change to the TC which is mandatory for operations by Community operators. TC holders are required to obtain an OSC approval before the Entry into Service (EIS) by a Community operator, but the validity of the TC is not dependant on the availability of approved elements. Due to an obligation in Part-OPS, Part-FCL, Part-66, Part-CC and Part-OR, Community operators shall use the elements as approved in the OSC under Part 21.

Only the TC holder/applicant can apply for an OSC.

The Agency shall also develop certification specifications that would contain the technical standards for each element of the OSC for an applicant to comply with before the Agency can issue such certificate.

The results of the approval are referred to in the OSC Data Sheet. The actual documents themselves (MMEL, minimum syllabi for type rating training) are kept by the OSC holder but shall be made available to those who are required to use them (operators) via a requirement in Part-21.

Changes/supplements to the approved elements proposed by other persons than the OSC holder can be approved under a supplemental OSC (SOSC).

STC applicants will have to consider the affect of their STC on the OSC elements. If already approved OSC elements are affected by the STC then re-evaluation is necessary before the Entry into Service (EIS) by a Community operator. The applicant for approval of the changes to the elements should then be the STC holder/applicant. The result of the approval will be an SOSC. The obligation in Part-OPS, Part-FCL, Part-66, Part-CC and Part-OR for Community operators to use the elements as approved under Part 21 also extends to the use of an STC.

This option would achieve the objective to ensure that new aircraft are provided in time with all the information, data and instructions, necessary for safe operation by a Community operator. It would also be in line with the BR as the new certificate will become an Annex to the TC needed for aircraft operated by community operators.

It would also facilitate European standardisation by allowing the Agency to set the standard for operational suitability for a specific aircraft type and for a type of operation.

3.1.5 Option 5: Mandatory part of TC for all applicants requesting EASA TC

Approval of the elements is mandatory before the issuance of an aircraft TC. The certification basis for the TC will therefore always include the requirement for the approval of the elements (similar to the requirement to produce a flight manual and instructions for continuing airworthiness). This can be achieved by including the approval standards for the elements in the airworthiness codes, or by creating

dedicated CS-ses to be added systematically to the certification basis. The TC will cease to be valid if the initial elements are not approved before Entry into Service (EIS) by a Community operator.

The results of the approval are referred to in the TC Data Sheet. The actual documents themselves (MMEL, minimum syllabi for type rating training) are kept by the TC holder but shall be made available to those who are required to use them (operators).

The same requirement will apply in principle also to STC applicants. A supplement to the approval of the elements will have to be applied for when the initial elements are affected by the physical change as included in the STC.

This option would achieve the objective to ensure that new aircraft are provided in time with all the information, data and instructions, necessary for safe operation. It would also be in line with the BR and would facilitate European standardisation by allowing the Agency to set the standard for the operation of a specific aircraft type.

This option was rejected by the rulemaking group as it put too much burden on the existing TC approval process.

3.1.6 Option 6: Mandatory linked to the TC only for Community-registered aircraft

This option is very similar to option 5. The approval of elements is done under a separate approval. Approval of the elements is an obligation for the TC applicant/holder comparable to the obligation to hold a Design Organisation Approval (DOA). The TC will therefore cease to be valid if the elements are not approved before Entry into Service (EIS) by a Community operator. The validity of the TC is linked to the availability of the approved elements for the operation by a Community operator.

This option would ensure that new aircraft are provided in time with all the information, data and instructions, necessary for safe operation in Europe. It would also be in line with the BR and would facilitate European standardisation by allowing the Agency to set the standard for the operation of a specific aircraft type.

This option was rejected by the rulemaking group because it considered that the validity of the TC should not be dependant on the availability of the OSC, which would not be in line with international arrangements and understanding.

3.1.7 Option 7: Elements issued as AMC

The Agency will evaluate data provided by the TC holder for operational suitability, using the OEB process or another process. After the evaluation the Agency will establish the elements and publish them as the standard to be used by operators for developing their MEL and training programmes.

The TC applicant/holder is obliged to provide the data allowing the Agency to establish the elements. Having provided the data and having participated in the OEB process is a condition for issuance of the TC.

If not linked to a specific certificate the legal form of the elements issued by the Agency can only be as Acceptable Means of Compliance (AMC). The Agency, as Community executive, can only issue technical standards as individual decisions or as "soft-law". Such AMC will be the EASA AMC to Part-OPS, Part-FCL, Part-66, Part-CC and to Part-OR for Community operators and training organisations which they should use to develop their MEL and training programmes unless they can demonstrate that other elements provide an equivalent level of safety.

Such AMC will have to go through the EASA rulemaking process, which is not the most suitable way to establish minimum standards linked to a particular aircraft type.

This option cannot be used for the MMEL because according to the BR[25] the MEL shall not be less restrictive than the MMEL, which implies that the MMEL must have a higher level of "bindingness" than AMC. It is therefore not in line with the BR.

3.2 The preferred option

The option selected by the rulemaking group and the Agency is option 4: approval of the elements under an Operational Suitability Certificate (OSC).

4. Sectors Affected

The sectors of the civil aviation community within the Agency's scope, which will be affected and the number of organisations / persons / aircraft affected:

4.1 Community Qualified personnel

4.1.1 Maintenance certifying staff

There is approximately 45,000 maintenance certifying staff with a Part-66 or equivalent license[26] in the Community.

4.1.2 Flight crew licences:

The following table is derived from the RIA included in NPA 2008-22f (related to the FCL NPAs 2008-17a, b and c)

Type of pilot licence	Numbers
Private Pilot Licence for aeroplanes PPL (A)	163,621
Private Pilot Licence for helicopters PPL (H)	9,774
Total PPL (A + H)	**173,395**
Commercial Pilot Licence for aeroplanes CPL (A)	49,709
Commercial Pilot Licence for helicopters CPL (H)	6,957
Total CPL (A + H)	**56,666**
Air Transport Pilot Licence for aeroplanes ATPL (A)	63,075
Air Transport Pilot Licence for helicopters ATPL (H)	3,196
Total ATPL (A + H)	66,271
TOTAL A + H	**296,332**
licences airship	6
licences balloons	9,047
licences sailplanes	72,439
GRAND TOTAL pilot licences	**377,824**

4.1.3 Cabin crew:

To date there are approximately 122,000 cabin crew in the Community.
Until Subpart O of EU-OPS[27] is applicable, not all cabin crew in the Community holds an attestation. From 16 of July 2009 all cabin crew in the Community shall hold an attestation.

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[25] Paragraph 8.a.3 of Annex IV to the BR

[26] Data from June 2006: includes Part-66 licenses, JAR-66 licenses and national equivalent.

[27] Annex III of Regulation (EEC) No. 3922/91 as amended by Regulation (EC) No. 859/2008

4.2 Aircraft TC and STC holders and applicants (Community and non-Community)

To date there are approximately:

- 60 holders of TCs for complex motor-powered aircraft (Community and non-Community);
- 180 holders of TCs for aircraft other than complex motor-powered aircraft (Community and non-Community);
- 2000 STCs issued by the Agency since 28-09-2003 for complex motor-powered aircraft (Community and non-Community);
- 1000 STCs issued by the Agency since 28-09-2003 for aircraft other than complex motor-powered aircraft (Community and non-Community);

The number of ongoing projects is divided as follows

	complex motor-powered aircraft	aircraft other than complex motor-powered aircraft
TC	3	27
"derivative" to TC	3	25
STC	581	364

4.3 Community Operators and aircraft owners

The following table is derived from table 7 in the RIA included in NPA 2008-22a related to Organisation Requirements.

Type of air operations	**Number**	
	Aircraft	**Operators**
Total Commercial Air Transport (AOC Holders)	134719	1100
Thereof commercial airlines excluding air taxis	5,206	370
Thereof Commercial Business Aviation / Air Taxis	1514	411
Total non-commercial aviation with complex motor powered aircraft	1486	689
Thereof Corporate Business Aviation	1095	298
Thereof Owner operated complex motor powered aircraft (Non commercial GA)	391	391
Aerial Work	11700	2600
TOTAL number of air operators under EASA competence	**147905**	**4389**

There are approximately 80,000 aircraft other than complex motor-powered aircraft with as many owners in Europe within the scope of the Basic Regulation.

4.4 Training organisations (Community and non-Community)

There are 200 Community and 28 non-Community Part-147 approved organisations.

Regarding the approved training organisations related to flight crew licensing, the estimated number of training organisations in the Community are provided in the RIA of NPA 2008-22a and are summarized below:

Pilot training organisations		Reported by 16 States	Estimated total for EU 27 + 4
ATOs providing training only for LPL and PPL (formerly called "registered facilities")		1,573	**2,712**
ATOs providing other pilot training	Flight Training Organisations (FTOs)	322	555
	Type Rating Training Organisations (TRTO)	240	414
	Partial TOTAL	562	**969**
GRAND TOTAL		2,135	**3,681**

4.5 Simulator manufacturers and operators (Community and non-Community)

Only 10 Member States have provided the number of Full Flight Simulators (FFS). There are a total 396 Simulators operated by 46 operators. Taking into account that these 10 Member States represent 50.53% of the total Community 27+4 population, according to the "statistical pocket book 2007" published by DG-TREN[28], and estimating that these Member States would have an approximated percentage of 55% of the total activity in this aviation sector, the total number of simulators in Community 27+4 can be approximately 574. The total number of operators in Community 27+4 can be approximately 67.

4.6 Approved maintenance organisations (Community and non-Community)

There are 2005 Part-145 approved organisations in the Community and 1635 non-Community Part-145 approved organisations.

4.7 Competent Authorities (EASA and NAA)

There are 32 competent authorities.

5. Impacts

5.1 Safety

5.1.1 The overall level of safety for pilot licenses and for air operations in the Community was presented in the RIA of the NPA 2008-22f and will be complemented in the RIA of the upcoming NPA on air operations. Here it would have been more interesting to provide a overview of the occurrences related to deficiencies in personnel training (crews and maintenance certifying staff) and to MMEL (or associated MELs). Even though many of the occurrences are related to human factors issues (e.g. errors of flight crew, maintenance staff), it is quite difficult, with the available data, to determine whether these errors occurred due to under-qualification of the personnel on the aircraft type. Although many occurrences have been identified where MEL was one of the contributing factors, it is also difficult to determine whether these were related to a deficiency in the associated MMEL.

5.1.2 Until recently, the applicable Community rules in the fields of flight crew licensing and air operations, although based on commonly agreed JAA requirements, were still national. This has lead to differences in approved training courses and MELs. Even in the case of maintenance certifying staff type rating training, where a Community regulation exists (Regulation EC No. 2042/2003), experience shows that differences in approved training courses are still present. Such differences do not contribute to a uniform high level of safety.

[28] http://ec.europa.eu/dgs/energy_transport/figures/pocketbook/doc/2007/pb_1_general_2007.pdf

With the introduction of Community rules regarding type training for personnel and MMEL in the form of an OSC which is the mandatory minimum for all operators and training organisations in the Community, supported by standardisation activities, it is expected that all training courses and MEL are approved using the same standard. This will contribute to a uniform high level of safety.

5.1.3 Another positive safety impact is expected from the fact that responsibilities will be more clearly defined i.e. someone will be responsible for the continued validity of the approved OSC element(s). It will be clear that this responsible entity shall monitor the experience with using the approved elements and will have to react in case of safety occurrences.

The responsibility for establishing the initial OSC with all the necessary elements will be with the TC holder of the aircraft. The Agency considers that the TC holder is best placed to develop these elements because it has all the necessary background information that is available from the design and airworthiness exercise. For example for developing a safe MMEL it is necessary to have insight in the systems safety analysis of the aircraft.

Confirming the responsibility of the TC holder for the OSC elements is therefore also expected to give a positive impact on safety.

5.2 Economic and Social

The economic and social impact is evaluated for each of the affected sectors.

5.2.1 Community Qualified personnel (maintenance certifying staff, flight and cabin crews)

Qualified personnel are not directly affected by the OSC rules. First of all, the personnel already qualified will remain qualified unless otherwise determined by the applicable transition measure of the applicable personnel regulations.

However, there are indirect effects related to the type qualification (e.g. type rating training or type specific data for type qualification) that will be based on the output of the OSC process. The OSC elements will establish uniform minimum duration and elements of training to be trained for each aircraft type or variant that might differ from those existing today among. Moreover, the overall impact is expected to be neutral since the differences might be positive on one side and negative on the other side. Additionally, should the individuals that are already employed by an organisation need any additional training, the organisation could take care of any possible additional training costs.
Last but not the least, there will be a common European standard for type (rating) training which will facilitate free movement of personnel. This will have a positive social impact.

5.2.2 Aircraft TC and STC holders and applicants (Community and non-Community)

Aircraft TC holders will be required to obtain an OSC for new aircraft types.

Whether or not they will need to obtain an OSC for existing types is determined by the transition and grandfathering measures. The differences in the impacts resulting from the different transition scenarios are discussed in section A.IV.F. of the explanatory note. As already explained the impacts of the preferred transition measures will be provided with the final Agency opinion.
The impact for TC holders of complex motor-powered aircraft will be different from the impact on TC holders of other aircraft.

5.2.2.1 Holders/applicants for TC of complex motor-powered aircraft

5.2.2.1.1 Costs of OSC development

Based on the experience gained with the JOEB process, it appears that the vast majority of applicants for a new TC or amended TC also apply for an evaluation of the OSC elements except for the syllabus for maintenance certifying staff, which is

currently not part of the JOEB evaluation. Nevertheless, most TC holders also offer type training for maintenance staff. It can therefore be concluded that the costs for the TC holders for developing the elements of the OSC will not change significantly.

5.2.2.1.2 Costs of continued validity of the OSC elements

The OSC holder will be required to investigate occurrences if they are caused by possible deficiencies in the OSC elements. This will require some additional resources but it is assumed that the existing management system or occurrences reporting systems can also be used for the first filtering of occurrence reports received by the OSC/TC holder on relevance to the OSC. The resources for investigating OSC related occurrences will anyhow be a good investment in the prevention of accidents and incidents, the costs of which would be a multitude of those investments.

5.2.2.1.3 Costs of Agency approval of OSC

Since the costs of the certification work by the Agency has to be recovered from the applicants for those certificates, the Agency will have to raise fees or charges for the issuance of an OSC or changes to the OSC. This will represent costs for the OSC applicant and applicant for changes to the OSC. However, the exact amounts will be included in the next amendment to the fees and charges Regulation and are not yet known. The discussion on the exact fees for the OSC and SOSC shall take place in the framework of the amendment to the fees and charges Regulation and it is not included in this RIA.

The costs for approval of changes to the OSC can be reduced if the OSC holder obtains the privilege to approve minor changes under its DOA. The extension of its DOA will require investments: see also 5.2.2.5.

5.2.2.1.4 Costs of increased liability

The TC holders have expressed concerns regarding a possible increase in liability in case of accidents or incidents as a result of the new OSC rules. The Agency acknowledges that there may be some change in liability for the TC holders; however, as explained below, there are reasons to believe that the OSC rules will not have a major effect on liability. Moreover, the OSC rules also introduce factors that may decrease the liability.

First of all, it should be noted that liability of manufacturers is already established by the general doctrine of product liability.

A products liability claim is usually based on one or more of the following causes of action:

- design defect,
- manufacturing defect,
- a failure to warn.

The claims may succeed even when products were used incorrectly by the consumer, as long as the incorrect use was foreseeable by the manufacturer. The failure to warn can be seen to include a failure to provide adequate training criteria for the user of the product.

Depending on the legal system and the circumstances of the particular case, the way product liability is determined by a court of justice, ranges from strict liability, where causation is the only requirement for legal liability, to liability based on negligence, where it is determined if the product's design or warning is reasonable.

Strict liability is determined regardless of any negligence by the manufacturer so the regulator cannot affect this type of liability.

The Agency acknowledges that by defining (new) responsibilities for a manufacturer in law, the legislator can affect the liability based on negligence. Failure to discharge those

responsibilities can be a reason for determining negligence. On the other hand, by establishing a regulatory standard for compliance the conclusion of negligence cannot easily be drawn in case the manufacturer has shown compliance with these regulatory standards and compliance has been confirmed by an authority certification. There will be an EASA certificate confirming compliance with the applicable rules which will protect the TC holder. So in the worst case there would be shared liability. Moreover, even without confirmation of the manufacturer's responsibilities in the current regulations, a court of justice could well establish negligence in case the manufacturer would not have produced the necessary training elements.

In the case of MMEL, the liability for Community (S)TC holders does not change because under the former JAR-MMEL/MEL provisions within the JAA, they were already required to produce an MMEL for authority approval. It is also the case for Brazilian manufacturers but not for American or Canadian Manufacturer industry.

5.2.2.2 Holders/applicants for TC of aircraft other than complex motor-powered aircraft

5.2.2.2.1 Costs of OSC development

Only in exceptional cases the holder of the TC will be required to develop additional elements to those that are already determined for the class or group of aircraft by the Agency in the applicable CS. This will be necessary only when the aircraft has special characteristics for which the standard OSC elements included in the applicable CS are not sufficient for safe operation of the aircraft. So in most of the cases there will be only a limited cost and even in the special case that the CS are not sufficient the applicant only needs to address the specificities of the design in addition to what is already covered by the CS and the associated cost will be proportionate to this task.

5.2.2.2.2 Costs of continuing validity of the OSC elements

The OSC holder will be required to investigate occurrences if they are caused by possible deficiencies in or the lack of specific OSC elements. This will require some additional resources but it is assumed that the existing management system or occurrences reporting systems can also be used for the first filtering of occurrence reports received by the OSC/TC holder on relevance to the OSC. The resources for investigating OSC related occurrences will anyhow be a good investment in the prevention of accidents and incidents, the costs of which would be a multitude of those investments.

5.2.2.2.3 Costs of Agency approval of OSC

Since the costs of the certification work by the Agency has to be recovered from the applicants for those certificates, the Agency will have to raise fees or charges for the issuance of an OSC or changes to the OSC. This will represent costs for the OSC applicant and applicant for changes to the OSC. In the case of OSC for aircraft other than complex motor-powered aircraft, the required check by the Agency will be minimal and therefore only a limited fee is expected. However, the exact amounts will be included in the next amendment to the fees and charges Regulation and are not yet known. The discussion on the exact fees for the OSC and SOSC shall take place in the framework of the amendment to the fees and charges Regulation and it is not included in this RIA.

5.2.2.2.4 Costs of increased liability

Similar to paragraph 5.2.2.1.3 above the TC holders of aircraft other than complex motor-powered aircraft may have concerns regarding a possible increase in liability in case of accidents or incidents as a result of the new OSC rules. In addition to the arguments made there it should be highlighted that in most cases the OSC for these aircraft will consist of the generic elements as included in the applicable CS which will be adopted by the Agency following a transparent rulemaking process. If there would appear to be a deficiency in these generic elements the TC holder will not be liable.

Only when the generic elements would appear to be insufficient to deal with specific characteristics of the aircraft, would the TC holder assume certain liability. However also in this case there will be an EASA certificate confirming compliance with the applicable rules which will protect the TC holder. So in the worst case there would be shared liability.

5.2.2.3 STC applicants for complex motor-powered aircraft

All new STC applicants have to assess possible effects of the STC on OSC elements. Only if there is an effect then they have to develop necessary supplements to the approved elements of the OSC under an S-OSC. Costs will be the cost of developing the SOSC, continued validity of SOSC elements and fees and charges for the Agency approval. All these costs will be a proportionate fraction of the costs associated to the initial OSC and will be commensurate to the extent of the STC and its effect on training and MMEL.

5.2.2.4 STC applicants for aircraft other than complex motor-powered aircraft

All new STC applicants have to assess whether the STC would require specific OSC elements, not already covered by the generic elements in the applicable CS issued by the Agency. Only if these generic elements would not be sufficient to deal with the STC, then they have to develop necessary specific elements for approval under an S-OSC. Costs will be the cost of developing the SOSC, continued validity of SOSC elements and fees and charges for the Agency approval. All these costs will be a proportionate fraction of the costs associated to the initial OSC and will be commensurate to the extent of the STC and its effect on training and MMEL.

5.2.2.5 DOA holders

TC holders who also hold a design organisation approval (DOA) may want to obtain the privilege to approve minor changes to the OSC. This will require investments in adapting the DOA organisation to address OSC issues but at the same time will bring the benefit of not having to obtain Agency approval of all changes. Moreover; obtaining the privilege is on a voluntary basis.

5.2.3 Community operators

The economic impact on European operators could differ on whether they operate complex motor-powered aircraft or aircraft other than complex motor-powered aircraft.

5.2.3.1 Economic impact on Community operators of complex motor-powered aircraft

As today, operators will be responsible for developing operators' customised and specific type training for their crew. The fact that these type training shall be based on the elements of training approved within the OSC of the aircraft should be beneficilal to operators and their competent authority as there will be a European standard to be used as basis. Even if the (S)OSC holders would transfer the cost of the development to the operators, it is expected that this cost will be shared between all the different operators. Moreover, the operators could reduce their own efforts and associated costs for the development of the basis type training syllabi. As other manuals, documentation and information provided by the (S)TC holder, it is expected that the elements of the OSC will be provided with the aircraft after its purchase. Therefore, the availability and accuracy of these elements should be ensured in the same way as other mandatory data specific to the aircraft type (e.g. AFM).

Currently in Europe under the JAA umbrella, operators operating in commercial air transport shall develop their MELs based on, but not less restrictive than the applicable MMEL. This common practice has also been applied to non commercial operations of complex motor-powered aircraft. The difference with today's system is that the MMEL will always exist for the aircraft type reducing the cost for any development at the operators level (e.g. it will be ensured that STC will develop the associated changes to the MMEL).

Customising outside the limits of the OSC will require S-OSC with associated costs. However there will then be benefits in e.g reduced training so the overall impact is compensated and can even be positive. Example: mixed fleet flying.

5.2.3.2 Economic impact on Community operators / owners of aircraft other than complex motor-powered aircraft

These operators will continue to be responsible for the development of the customised and operator's specific training programs and MELs, when an MEL is required (only for commercial operations). The difference with today's system will be that these training courses and MELs will have to be based on the elements of the OSC for the aircraft. Because of the relatively easy process to obtain OSC approval for these aircraft and because the content of the OSC for these aircraft will be mostly available in the public domain, it is not expected to have any additional associated cost for these operators and owners.

5.2.4 Training organisations, simulator manufacturers and operators and approved maintenance organisations (Community and non-Community)

These organisations will need to base their training courses on the type rating training syllabi for the aircraft type. They will have to obtain these data either from the (S)OSC holders, or from the operators. In case they will have to get this information from the (S)OSC holders, it is expected that the cost would be proportionate to the product, as regulated by the applicable market mechanisms. It is also expected that this cost will be compensated by the reduction on efforts and associated costs of the development of these syllabi. Additionally, they have the possibility to apply for customized training syllabi (e.g. if they have advanced training devices) that could eventually reduce the training costs. The process will be nevertheless controlled by one single authority

5.2.5 Simulators manufacturers and operators.

Simulators' manufacturers shall develop their simulators based on the core reference data provided by the (S)OSC holder. Even if the (S)OSC holders transfer the cost of the development to the simulator manufacturers and the latter would transfer the cost to simulator operators, it is expected that the total cost will be shared between all the different players. Moreover, the STD manufacturers and STD operators could reduce the efforts and associated costs for the development of this core reference data.

5.2.6 Competent Authorities (EASA and NAA)

There would not be any economical impact on NAA, as they will be continue to perform their work of approving the operators MELs and training courses. The total cost of these approvals could probably be reduced and balanced. The cost of the Agency approval could be balanced by the reduction of efforts and associated cost for the approval they NAA will be provided with the European standard.

5.3 Environmental

No impact expected.

5.4 Other aviation requirements outside the EASA scope

No impact expected.

5.5 Other impacts: Harmonisation with non-Community aviation regulations

With regards to regulators outside the Community that have similar OEB evaluations (FAA and TCCA), it is expected that the OSC may or may not lead to a harmonized situation depending of the process used (Joint/ no-joint evaluation).

Comparison can not be performed for those elements of the OSC which do not have equivalent in other regulatory systems. However, Non-Community competent authorities may also benefit of such process. For instance, the OSC type specific

elements and MMEL could also be used as basis for their approvals, if the non-Community competent authority wishes to do so.

An interesting regulatory provision in the US which is relevant for the issues as covered by the future OSC and SD is the special certification review (SCR). According to the FAA, this post-certification evaluation provides "a way to evaluate the type certification project and potentially unsafe design features on previously approved products." The FAA initiates an SCR based on a variety of issues, one of which is in-service experience pointing to safety problems. The official list of safety problems that may generate an SCR includes:

- complex or unique design features;
- advanced state-of-the-art concepts in design or manufacturing;
- potentially unsafe features used on similar previous designs requiring further analysis and evaluation;
- compliance areas critical to safety and **operational suitability** that require evaluations;
- unsafe **operational or maintainability characteristics**;
- ELOS [equivalent level of safety] determinations with potential major effects on safety;
- complicated interrelationships of unusual features.

The FAA has conducted SCRs on a variety of aircraft and systems, usually following a series of accidents that highlight safety issues.

One of the safety recommendations included in a NTSB report on Learjet high-speed upset accidents dated May 6, 1982 (NTSB/AAR-83/01) is worthwhile to be highlighted: '…Establish a requirement that manufacturers provide a training guide for pilot transition into currently certificated general aviation turbojet airplane. The training guide should encompass the entire flight envelope in which the airplane will be operating and any unique aspects of its systems design, handling characteristics, and performance. The training guide should be an approved manual for use by appropriate inspectors, pilot schools, flight instructors, and pilot examiners…' (A-82-124)

The accident rate for the Robinson R22 experienced a turnaround after the (Special Federal Aviation Regulation) SFAR process highlighted some training issues. The Robinson helicopter series is also subject to a training SFAR, and that requirement appears to have had a positive effect on the Robinson accident rate.

These examples show that also other authorities have found ways to deal with operational suitability issues, closely linked to the TC process. However, the SCR provision is more reactive whereas the OSC process is aimed at preventing safety problems.

Since the OSC concept does not (yet) exist as such in any aviation safety regulatory system, its introduction in the Community will not lead to better harmonisation. The expected impacts on non-Community stakeholders and authorities are the following:

- Non-Community TC and STC applicants must also comply with the OSC requirements. The bilateral arrangements between exporting states and the Community should be amended to address possible acceptance of foreign certificates or findings made by foreign authorities. In the absence of such bilateral arrangements, the non-Community applications will be dealt with similar to applications from Community applicants. This doesn't preclude, however, that evaluations to approve the OSC elements can be done together with other authorities as it is the case today.

- Community applicants who have obtained an OSC are expected to have certain benefits when exporting their products or STCs: They will be able to present to their customers a complete package for operating the product endorsed by EASA

and it is expected that any local approval needed for any of the OSC elements will be facilitated by the EASA approval.

5.6. Equity and fairness issues identified

The distribution of positive impacts and negative impacts.

With regards to options 2-6, there is a positive impact on Community-operators and qualified personal as data needed for the aircraft operations will be available. Option 7 could lead to unfair/non-equal situations.

Fair competition between Community and non-Community TC applicants and holders has also contributed to the selection of the preferred option.

SME (small/medium enterprises) could be affected if not considered in defining the process. The process and requirements must be adapted to the size and complexity of the product to avoid unfair situations. This has been considered by the different processes applied to (S)TC holders and applicant of aircraft other than complex motor-powered aircraft.

6. Summary and Final Assessment

6.1 After comparison of all possible options and the preliminary impacts of each of them, it has been decided to have the additional elements for operations approved through a certification process parallel to the TC process. The result would be a certificate which is mandatory for aircraft to be operated by Community operators.

6.2 The proposed option affects (S)TC holders and applicants, operators, approved training organisation, maintenance organisations, qualified personnel (flight and cabin crews and maintenance certifying staff), STD simulators, STD manufacturers and competent authorities (EASA NAA). The size and complexity of the activity of the affected organisations as well as the safety tasks relevant to each qualified personnel have been considered to ensure the equity and fairness of the proposal.

6.3 The preferred option represents the best compromised option to implement the BR and to ensure the main objective of the Agency: to establish and maintain a high uniform level of civil aviation safety in Europe.

Appendix VII List of abbreviations

The following are abbreviation used in this NPA:

AGNA	Advisory Group of National Authorities
AEI	Aircraft Engineers International
AIA	Aerospace Industries Association (US)
AMC	Acceptable Means of Compliance
ASD	AeroSpace and Defence Industries Association of Europe
BR	Basic Regulation: Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p.1).
CRD	Comment Response Document
CRT	Comment-Response Tool
CS	Certification Specification
CS-AWO	Certification Specifications for All Weather Operations
CS-MMEL	Certification Specifications for Master Minimum Equipment List
DOA	Design Organisation Approval (in accordance with Part-21 Subpart J)
EASA	European Aviation Safety Agency
EC	European Community
ECA	European Cockpit Association
EFB	Electronic Flight Bag
EIS	Entry into Service
ETF	European Transport workers' Federation
EU	European Union
EVS	Enhanced Vision System
FAA	Federal Aviation Administration
GAMA	General Aviation Manufacturers Association
GM	Guidance Material
HUD	Head Up Display
IATA	International Air Transport Association
JAA	Joint Aviation Authorities
JOEB	Joint Operations Evaluation Board
MEL	Minimum Equipment List
MMEL	Master Minimum Equipment List
MRB	Maintenance Review Board
NPA	Notice of Proposed Amendment
OEB	Operations Evaluation Board
OSC	Operational Suitability Certificate
OSCDS	Operational Suitability Certificate Data Sheet
Part-FCL	Implementing Rules applicable to flight crew licenses
Part-M	Implementing Rules applicable to maintenance
Part-OPS	Implementing Rules applicable to air operations
Part-OR	Implementing Rules applicable to organisations and their management systems

Part-66	Implementing Rules applicable to maintenance certifying staff
Pre-RIA	Preliminary Regulatory Impact Assessment
RIA	Regulatory Impact Assessment
SD	Safety Directive
SOSC	Supplemental Operational Suitability Certificate
SSCC	Safety Standards Consultative Committee
STC	Supplemental Type Certificate
STD	Synthetic Training Devices
TC	Type Certificate
TCCA	Transport Canada
TCDS	Type Certificate Data Sheet
ToR	Terms of Reference

B. DRAFT OPINION AND DECISIONS

The text of the amendment is arranged to show deleted text, new text or new paragraph as shown below:

- deleted text is shown with a strike through: ~~deleted~~
- new text is highlighted with grey shading: new
- ….

  Indicates that remaining text is unchanged in front of or following the reflected amendment.

I. Draft Opinion

A. Proposed Amendment to Regulation (EC) No. 1702/2003

Amend article 1 as follows

Article 1 Scope and definitions

1. This Regulation lays down, in accordance with Article 5(4) and 6(3) of the Basic Regulation, common technical requirements and administrative procedures for the airworthiness and environmental certification of products, parts and appliances specifying:

(a) the issue of type-certificates, restricted type-certificates, supplemental type-certificates, operational suitability certificates, supplemental operational suitability certificates and changes to those certificates;

…

2. For the purpose of this regulation, the following definitions shall apply:

…

(e) 'Operational Suitability Certificate (OSC)' is considered a change associated to a type certificate containing the approval of information necessary for the safe operation of the aircraft type as defined in paragraph 5(e)(iv), 5(e)(v) and 5(e)(vi) of Article 5 of the Basic Regulation.

(f) 'Safety Directive' is a decision issued by the Agency to ensure safe operation of already certificated products. It constitutes a mandatory amendment to the type certificate, supplemental type certificate, operational suitability certificate or supplemental operational suitability certificate with which individual products or operations shall conform.

Insert a new article 4b as follows:

Article 4b Operational Suitability Certificates

1. *Complex motor-powered aircraft*

a. For complex motor-powered aircraft for which the type-certificate or restricted type-certificate was issued after *[xx months after adoption of this rule]* an operational suitability certificate as specified in Subpart C of Part-21 shall be obtained by the holder of the type-certificate or restricted type-certificate before the first aircraft of the type is operated by a Community operator and shall be kept valid as long as the aircraft type is operated by a Community operator.

b. [*Grandfathering provision: To be determined by EC]*

c. For a major design change to a complex motor-powered aircraft approved in accordance with Subpart D of Part 21 or resulting from 21A.3B or 21A.3C after *[xx months after adoption of this rule]* that affects the approved element(s) of the operational suitability certificate, the holder of the type-certificate or restricted type-certificate must obtain approval

of a change to the operational suitability certificate in accordance with 21A.80 before the first aircraft modified in accordance with this design change is operated by a Community operator.

d. For any supplemental type-certificate to a complex motor-powered aircraft issued after *[xx months after adoption of this rule]* that affects operational suitability, a supplemental operational suitability certificate shall be obtained by the holder of the supplemental type-certificate before the first aircraft modified in accordance with the supplemental type-certificate is operated by a Community operator.

2. *Aircraft other than complex motor-powered aircraft*

a. For aircraft other than complex motor-powered aircraft for which the type-certificate or restricted type-certificate was issued after *[xx months after adoption of this rule]* an operational suitability certificate as specified in Subpart C of Part-21 shall be obtained by the holder of the type-certificate or restricted type-certificate before the first aircraft of the type is operated by a Community operator and shall be kept valid as long as the aircraft type is operated by a Community operator.

b. [*Grandfathering provision: To be determined by EC]*

c. For any supplemental type-certificate to an aircraft other than a complex motor-powered aircraft issued after *[xx months after adoption of this rule]* for which the Agency has identified that approval in accordance with 21A.81 of one or several elements of the operational suitability certificate is necessary to ensure safe operation of the aircraft, a Supplemental Operational Suitability Certificate shall be obtained by the holder of the supplemental type-certificate before the first aircraft modified in accordance with the supplemental type-certificate is operated by a Community operator.

Subpart A – General Provisions

Insert new paragraph 21.3C as follows:

21A.3C Additional airworthiness specifications for operations and safety directives

REACTING TO GENERAL SAFETY PROBLEMS

(a) The holder of a type certificate, supplemental type certificate, operational suitability certificate or supplemental operational suitability certificate shall demonstrate compliance with additional airworthiness specifications for operations, when:

(1) An amendment to the airworthiness code containing additional airworthiness specifications for operations, has been issued by the Agency in accordance with 21A.16A; and

(2) The Agency has notified to the holder of the type certificate, supplemental type certificate, operational suitability certificate or supplemental operational suitability certificate:

(i) the amended or new paragraphs of the airworthiness code containing additional airworthiness specifications for operations, that must be complied with; and

(ii) the period within which compliance shall be demonstrated.

(b) The Agency shall approve the demonstrating of compliance when it is satisfied that compliance is demonstrated with the applicable specifications as notified under (a)(2)(i) of this paragraph or with provisions that provide for an equivalent level of safety.

(c) The Agency shall issue a safety directive containing the change in the approved design or to the elements of the operational suitability certificate resulting from the approved demonstration of compliance .

(d) The holder of the type certificate, supplemental type certificate, operational suitability certificate or supplemental operational suitability certificate shall make available to all known

operators or owners of the affected product and on request, to any person required to comply with the safety directive, appropriate descriptive data and accomplishment instructions.

(e) Compliance with the amended airworthiness code containing additional airworthiness specifications for operations will be recorded in the type certificate data sheet, supplemental type certificate, operational suitability certificate data sheet or supplemental operational suitability certificate data sheet.

(f) By derogation from subparagraphs (a) through (e) the Agency shall issue a safety directive containing additional airworthiness specifications for operations when:

(1) An amendment to the airworthiness code containing additional airworthiness specifications for operations, has been issued by the Agency in accordance with 21A.16A; and

(2) The Agency has determined that the demonstrating of compliance with the additional airworthiness specifications for operations by the holder of the type certificate, supplemental type certificate, operational suitability certificate or supplemental operational suitability certificate is impractical;

RESTORING THE LEVEL OF SAFETY OF OPERATIONAL SUITABILITY CERTIFICATES OR SUPPLEMENTAL OPERATIONAL SUITABILITY CERTIFICATES

g) The Agency shall issue a safety directive when a condition leading to unsafe operation has been determined by the Agency to exist in the operation of an aircraft, as a result of a deficiency in the approved elements of the relevant operational suitability certificate or supplemental operational suitability certificate.

(h) When a safety directive has to be issued by the Agency to correct the unsafe operation referred to in sub-paragraph (g), the holder of the operational suitability certificate or supplemental operational suitability certificate shall:

(1) Propose the appropriate correction to the element of the operational suitability certificate and submit the proposal to the Agency for approval; and

(2) Following approval by the Agency make available to all known operators or owners of the affected aircraft and on request, to any person required to comply with the safety directive, appropriate descriptive data and accomplishment instructions.

ALL SAFETY DIRECTIVES

(i) A safety directive shall contain at least the following information:

(1) An identification of the affected products;

(2) The additional airworthiness specifications for operations that must be complied with or the required action(s);

(3) The compliance time;

(4) The date of entry into force;

(5) The type of operation to which the safety directive applies.

(j) Any person may apply for approval of a deviation to the safety directive in a form and manner established by the Agency. The Agency shall approve such deviation when it is satisfied that the deviation provides an acceptable level of safety.

Subpart B –Type-Certificates and Restricted Type-Certificates

Amend 21A.16A as follows:

21A.16A Airworthiness codes

The Agency shall issue in accordance with Article ~~14~~ 19 of the Basic Regulation airworthiness codes, including an airworthiness code containing additional airworthiness specifications for operations, as standard means to demonstrate compliance of products, parts and appliances with the essential requirements of Annex I to the Basic Regulation. Such codes shall be sufficiently detailed and specific to indicate to applicants the conditions under which certificates will be issued.

Insert new Subpart C as follows:

Subpart C – ~~Not applicable~~ Operational Suitability Certificates and Supplemental Operational Suitability Certificates

21A.62 Scope

(a) The scope of the operational suitability certificate covers the following elements when applicable:

1. the minimum syllabus of pilot type rating training, including determination of type rating and the aircraft reference data to support the qualification of associated simulator(s);

2. the minimum syllabus of maintenance certifying staff type rating training including determination of type rating;

3. Determination of type or variant for cabin crew and type specific data for cabin crew training and;

4. the master minimum equipment list;

(b) The scope of a supplemental operational suitability certificate covers changes to one or more of the elements as listed in subparagraph (a).

21A.64 Eligibility

(a) Only the holder of or applicant for an aircraft type certificate or restricted type certificate may apply for an operational suitability certificate for the aircraft covered by the respective certificate.

(b) Any natural or legal person may apply for a supplemental operational suitability certificate.

21A.65 Application for Operational Suitability Certificate and supplemental operational suitability certificate

(a) An application for an operational suitability certificate or supplemental operational suitability certificate shall be made in a form and manner established by the Agency.

(b) The application shall include the type(s) of operation(s) and information regarding the elements of 21A.62(a) or changes thereto, for which the certificate is requested.

21A.66 Certification Specifications for operational suitability

The Agency shall issue in accordance with Article 19 of the Basic Regulation certification specifications for operational suitability as standard means to demonstrate compliance of the elements of 21A.65(b) with the relevant essential requirements of Annexes I, III and IV to the Basic Regulation and its implementing rules.

21A.67 Designation of operational suitability certification basis

The Agency shall notify to the applicant the operational suitability certification basis for the issuance of the operational suitability certificate. It shall consist of:

(a) The applicable certification specifications for operational suitability issued in accordance with 21A.66 that are effective on the date of application, unless:

1. The Agency accepts other means to demonstrate compliance with the essential requirements of Annexes I, III and IV to the basic Regulation;

2. Compliance with later effective amendments is elected by the applicant. The applicant shall also comply with any other amendment that the Agency finds is directly related; and

(b) Special detailed specifications for operational suitability prescribed by the Agency if the related certification specifications as prescribed under subparagraph (a) do not contain adequate or appropriate safety standards, because:

1. The type has novel or unusual design features; or

2. The intended use of the type is unconventional; or

3. Experience from other similar types in service or types having similar design features, has demonstrated to lead to unsafe operations.

21A.68 Compliance with the operational suitability certification basis

(a) The applicant for an operational suitability certificate shall demonstrate compliance with the operational suitability certification basis designated in accordance with 21A.67.

(b) The applicant shall provide the Agency with a certification programme, detailing the means for compliance demonstration. The programme shall be updated as necessary during the certification process.

(c) The applicant shall make a statement that the elements of 21A.65(b) are in compliance with the operational suitability certification basis.

21A.69 Issue of the Operational Suitability Certificate

The applicant shall be entitled to have an operational suitability certificate issued by the Agency after:

(a) Submitting the statement referred to in 21A.68(c); and

(b) The Agency is satisfied that the applicant has demonstrated that the elements of 21A.65(b) comply with the operational suitability certification basis designated in accordance with 21A.67; and

(c) Any provisions not complied with are compensated for by factors that provide an equivalent level of safety; and

(d) Notwithstanding subparagraphs (a), (b) and (c) an operational suitability certificate with appropriate limitations may be issued by the Agency before all elements included in the application have been demonstrated to comply with the applicable approval specifications.

21A.70 Issue of the Operational Suitability Certificate for aircraft other than complex motor-powered aircraft

(a) Notwithstanding paragraphs 21A.67, 21A.68 and 21A.69 the applicant for an operational suitability certificate for an aircraft other than a complex motor-powered aircraft shall be entitled to have an operational suitability certificate issued by the Agency, composed of the

applicable certification specifications for operational suitability containing generic approved elements issued by the Agency after it has made a statement that these generic approved elements will ensure safe operation of the aircraft, unless:

1. the Agency has identified that approval in accordance with 21A.69 of one or several elements of the operational suitability certificate is necessary to ensure safe operation of the aircraft and has notified the applicant thereof; or

2. the applicant has elected to apply for approval of specific elements in accordance with 21A.69.

(b) If approval of specific elements is required or elected in accordance with subparagraph (a)1. or (a)2., the operational suitability certification basis is established by the Agency in accordance with 21A.67(b) and notified to the applicant.

21A.71 Operational Suitability Certificate

The operational suitability certificate includes:

(a) the elements approved in accordance with 21A.69 or the generic elements in accordance with 21A.70;

(b) any conditions or limitations prescribed by the applicable certification specifications or by the Agency;

(c) the operational suitability certificate data sheet;

(d) any changes approved under 21A.80; and

(e) any applicable safety directive.

21A.73 Occurrences

Where the holder of the operational suitability certificate determines that reported occurrences result from a shortcoming in the approved elements of the operational suitability certificate, it shall analyse the reason for the shortcoming and report to the Agency the results of its analysis and any action it is taking or proposes to take to correct that shortcoming.

21A.75 Record keeping

All information relevant to the operational suitability certificate shall be held by the holder of the certificate at the disposal of the Agency and shall be retained to ensure continued operational suitability as long as the relevant aircraft type or modified aircraft is operated by a Community operator.

21A.76 Documents

The holder of the operational suitability certificate shall make available to any person required to comply with one or more elements of the operational suitability certificate the relevant document or documents approved under the operational suitability certificate and its updates. Copies of the documents and its updates shall be provided, on request to the Agency and the competent authority of the operator of the aircraft.

21A.77 Transferability

(a) An operational suitability certificate may only be transferred if the type certificate or restricted type certificate of the aircraft for which a corresponding operational suitability certificate was issued is also transferred to the same natural or legal person.

(b) A supplemental operational suitability certificate for a supplemental type certificate may only be transferred if the supplemental type certificate for which it was issued is also transferred to the same natural or legal person.

(c) Other supplemental operational suitability certificates may be transferred to any person who is prepared to undertake the associated responsibilities as stipulated in 21A.73, 21A.75 and 21A.76.

21A.78 Duration and continued validity

An operational suitability certificate or supplemental operational suitability certificate is issued for unlimited duration and shall remain valid subject to the certificate not being suspended, surrendered or revoked under the applicable administrative procedures established by the Agency.

21A.79 Classification of changes

Changes to the elements of 21A.65(b) as approved under the operational suitability certificate are classified as minor or major. A major change is one that has appreciable effect on the operation of the aircraft. All other changes are minor.

21A.80 Approval of changes proposed by the holder of the operational suitability certificate

(a) Only the holder of the operational suitability certificate can apply for an amendment of this certificate.

(b) Major changes to the elements of 21A.65(b) shall be approved in accordance with 21A.65, 21A.67, 21A.68 and 21A.69.

(c) Minor changes to the elements of 21A.65(b) shall be approved:

1. in accordance with subparagraph (b); or.

2. by an appropriately approved design organisation under a procedure agreed by the Agency.

21A.81 Changes approved under a Supplemental operational suitability certificate

(a) Changes to one or more of the elements of 21A.65(b) can also be approved under a supplemental operational suitability certificate.

(b) The Agency shall notify to the applicant the applicable certification specifications. They are determined in accordance with 21A.67.

(c) The applicant shall demonstrate compliance with the applicable certification specifications in accordance with 21A.68 and make a statement of compliance.

(d) The applicant shall be entitled to have a supplemental operational suitability certificate issued by the Agency after :

(1) Submitting the statement referred to in (c); and

(2) The Agency is satisfied that the changes to the elements of 21A.65(b) have been demonstrated to comply with the applicable certification specifications designated in accordance with (b); and

(3) Any provisions not complied with are compensated for by factors that provide an equivalent level of safety; and

(e) The supplemental operational suitability certificate is considered to include:

(1) the changes approved in accordance with (d); and

(2) any conditions or limitations prescribed by the applicable certification specifications for operational suitability or by the Agency; and

(3) the supplemental operational suitability certificate data sheet.

(f) Paragraphs 21.A3C, 21A.73, 21A.75 and 21A.76 are also applicable to the holder of a supplemental operational suitability certificate.

Subpart D – Changes to type-certificates and restricted type-certificates

Amend 21A.101 as follows:

21A.101 Designation of applicable certification specifications and environmental protection requirements

…….

(f) An applicant for a change to a type-certificate shall demonstrate that the changed product complies with the airworthiness code containing additional airworthiness specifications for operations for each area, system, part or appliance that the Agency finds is affected by the change.

Subpart J – Design organisation approval

Amend 21A.263 as follows:

21A.263 Privileges

……..

(c) The holder of a design organisation approval shall be entitled, within its terms of approval and under the relevant procedures of the design assurance system:

……..

8. to classify changes to the elements of 21A.65(b), approved under the operational suitability certificate, as "major" or "minor" and approve minor changes to these elements.

B. Proposed Amendment to Regulation (EC) No. 2042/2003

I. Part M

Commission Regulation (EC) No 2042/2003 Annex I (Part M) is amended as follows:

M.A.202 Occurrence reporting

(a) Any person or organisation responsible under M.A.201 shall report:

1. to the State of registry, the organisation responsible for the type design or supplemental type design and, if applicable, the Member State of operator, any identified condition of an aircraft or component that hazards seriously the flight safety.

2. to the holder of the operational suitability certificate or supplemental operational suitability certificate any condition of the approved elements of the operational suitability certificate or supplemental operational suitability that hazards seriously the flight safety.

……

The following paragraphs of Part-M are amended by adding the words "and safety directives" each time "airworthiness directives are mentioned:

- M.A.301 Continuing airworthiness tasks
- M.A.303 Airworthiness directives
- M.A.305 Aircraft continuing airworthiness record system
- M.A.401(b) Maintenance data
- M.A.501 Installation
- M.A.503 Service life limited components
- M.A.708(b) Continuing airworthiness management
- M.A.710 Airworthiness review
- Appendix II: EASA Form 1; Use of the EASA Form 1 for maintenance
- Appendix VIII: Limited Pilot-Owner Maintenance

II. Part 145

Commission Regulation (EC) No 2042/2003 Annex II (Part 145) is amended as follows:

145.A.35 Certifying staff and category B1 and B2 support staff

(a) In addition to the appropriate requirements of 145.A.30(g) and (h), the organisation shall ensure that certifying staff and category B1 and B2 support staff have an adequate understanding of the relevant aircraft and/or components to be maintained together with the associated organisation procedures. In the case of certifying staff, ~~this~~ the competency shall be evaluated by a satisfactory assessment and must be accomplished before the issue or re-issue of the certification authorisation according to an organisation procedure.

In addition, certifying staff and category B1 and B2 support staff can only exercise their privileges if the organisation has ensured that certifying staff and category B1 and B2 support staff comply with the terms of Safety Directives resulting from shortcomings of training.

……

(e) The organisation shall establish a programme for continuation training for certifying staff and category B1 and B2 support staff, including a procedure to ensure compliance with the

relevant paragraphs of 145.A.35 as the basis for issuing certification authorisations under this Part to certifying staff, and a procedure to ensure compliance with Part 66 and Part 21.

The following paragraphs of Part-145 are amended by adding the words "and safety directives" each time "airworthiness directives are mentioned:

- 145.A.42(b) Acceptance of components
- 145.A.45 Maintenance data
- Appendix I: EASA Form 1; Use of the EASA Form 1 for maintenance

III. Part 66

Commission Regulation (EC) No 2042/2003 Annex III (Part 66) is hereby amended as follows:

Note: Because the structure of the paragraph regarding type training is completely changed by the proposals of NPA 2007-07, it is decided to use the text of this NPA as the basis for introducing the Operational Suitability Certificate concept. This will improve the compatibility of the two proposals.

66.A.45 (g) Type/task training and ratings

……

(g) Except as otherwise specified in paragraph (h), type ratings shall be granted following satisfactory completion of the relevant category B1, B2 or C aircraft type training approved by the competent authority or conducted by an appropriately approved Part-147 maintenance training organisation.

The applicant is required to comply with the applicable type training requirement. The type training requirement consists of:

- theoretical training and examination and
- practical training and assessment and
- mandatory additional OJT and assessment, in the case of first type rating within the same category according to 66.A.1 (a) and sub-category according to 66.A.1 (b).

The rating training course shall be based on the minimum syllabus for maintenance certifying staff type rating training as established in accordance with Part-21.

……

Appendix I

Basic knowledge requirements

……

MODULE 10. AVIATION LEGISLATION

……

10.5 Aircraft Certification

(a) *General*

……

Operational Suitability Certificate;

Supplemental Operational Suitability Certificate;

……

10.7 Applicable National and International Requirements for (if not superseded by EU requirements)

(a)

……

Airworthiness Directives and Safety Directives;

……

IV. Part 147

No changes

C. Proposed Amendment to Part-OR

OR.GEN.050 Safety Directives

Unless otherwise specified by the Agency, an organisation shall comply with the requirements of any safety directive issued by the Agency that are applicable to their activity.

D. Proposed Amendment to Part-OPS

OPS.GEN.040 Safety Directives

Unless otherwise specified by the Agency, an organisation shall comply with the requirements of any safety directive issued by the Agency that are applicable to their activity.

E. Proposed Amendment to Part-CC

CC.XX Safety Directives

Unless otherwise specified by the Agency, an organisation shall comply with the requirements of any safety directive issued by the Agency that are applicable to their activity.

II Draft Decisions

A. Proposed Amendment to AMC and GM to Part-21

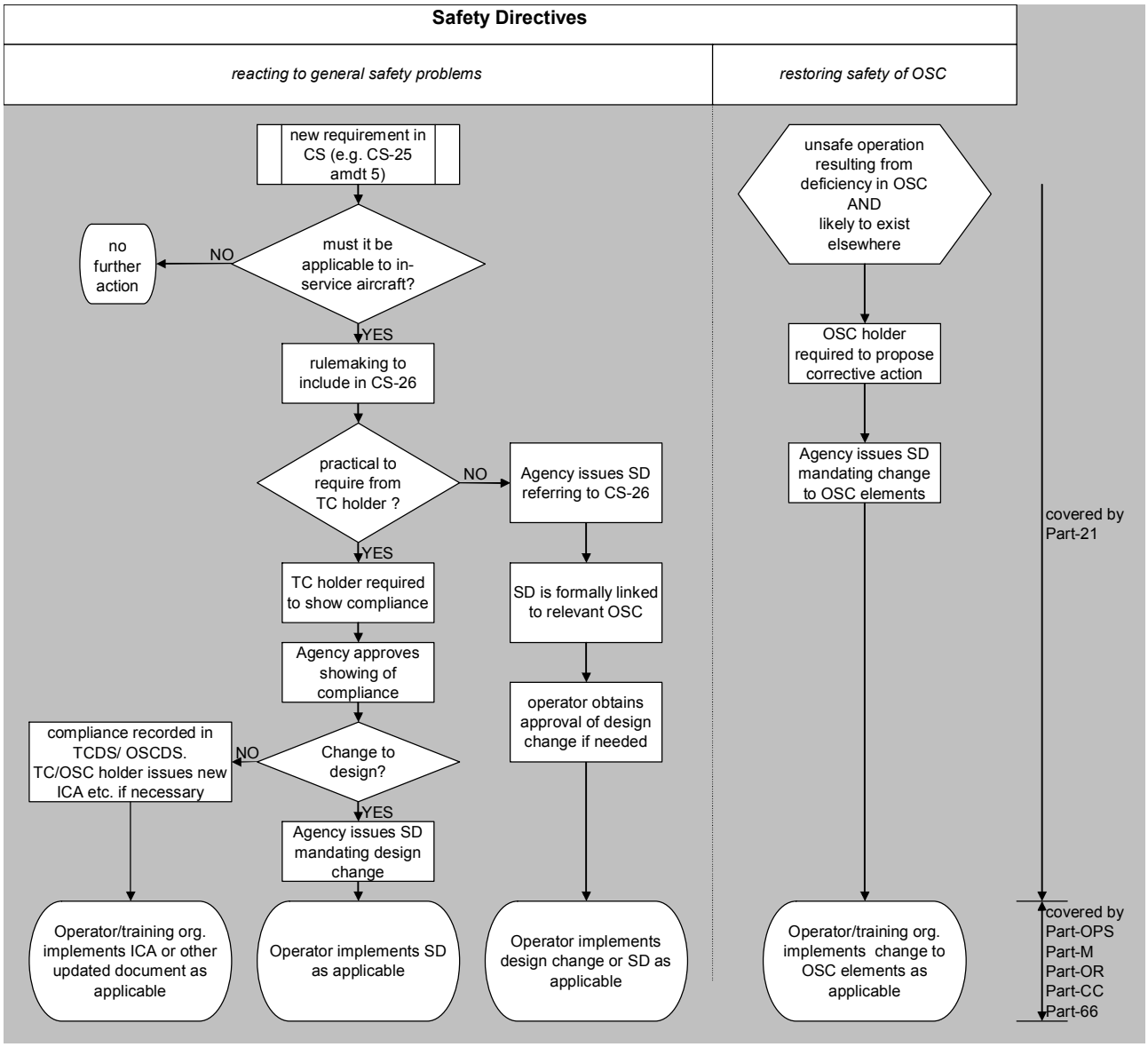
SECTION A

Subpart A – General

Insert new GM as follows:

GM 21A.3C Additional airworthiness specifications for operations and safety directives

The different possibilities for Agency measures reacting to general safety problems and for correcting deficiencies in OSC or SOSC in accordance with 21A.3C are summarised in the following flow chart:



Insert new GM as follows:

GM 21A.3C(g)

Determination of the condition leading to unsafe operation resulting from a deficiency on one or more elements of an (supplemental) operational suitability certificate

1. A condition leading to unsafe operation exists if there is factual evidence (from service experience, analysis or tests) that:

(a) An event may occur that would result in fatalities, usually with the loss of the aircraft, or reduce the capability of the aircraft or the ability of the crew to cope with adverse operating conditions to the extent that there would be:

(i) A large reduction in safety margins or functional capabilities, or

(ii) Physical distress or excessive workload such that the crew cannot be relied upon to perform their tasks accurately or completely, or

(iii) Serious or fatal injury to one or more occupants

unless it is shown that the probability of such an event is within the limit defined by the applicable requirements, or

(b) There is an unacceptable risk of serious or fatal injury to persons other than occupants, or

(c) Features or measures intended to minimise the effects of survivable accidents are not performing their intended function or are not achieving their intended safety objective.

2. The assessment whether a condition leading to unsafe operation resulting from a deficiency of the approved element of the OSC or SOSC exists should consider at least the following:

1. Crew and maintenance personnel errors due to lack of knowledge of an aircraft;
2. Unique characteristics of a design feature different from established design practices;
3. The existence of similar previous events, and whether or not they resulted in unsafe operations;
4. Complexity of the operating procedures and training; and
5. Clarity/accuracy/availability/currency and practical applicability of documents and procedures.

3. When the condition relates to the MMEL consideration should also be given to AMC 21A.3B(b) and GM 21A.3B(b)

Insert new GM as follows:

GM 21A.16A Airworthiness codes

The airworthiness code containing additional airworthiness specifications for operations will only be amended following an amendment to another airworthiness code such as CS-25, CS-23 etc when the new specification should also apply to already issued certificates to ensure an appropriate level of safety.

Insert AMC and GM to new Subpart C as follows:

Subpart C - Operational Suitability Certificate and Supplemental Operational Suitability Certificate

GM No. 1 to 21A.62(b)
Clarification of the term "when applicable".

The term "when applicable" indicates that not all elements are always part of the OSC. For example, when the operational rules do not require cabin crew for an aircraft with a certain number of passenger seats, the element of (b)(3) is not required for the OSC of this aircraft.

GM No. 2 to 21A.62(b)
Determination of type or variant

The criteria for the determination of whether an aircraft with a new type certificate (TC) is considered a new type or is a variant with reference to another aircraft type from the same TC holder for the purpose of the specific OSC element are provided in the applicable Certification Specifications for maintenance certifying staff, pilots and cabin crew.

AMC 21A.62(b)
Concept of minimum syllabus for maintenance certifying staff and pilots type rating training

1. The minimum syllabus is the result of the approval and is referenced in the Operational Suitability Certificate Data Sheet (OSC-DS) which the Agency will publish for each OSC issued.
2. The content of the minimum syllabus will depend on the aircraft type and types of operations being evaluated. The minimum syllabus should provide at least the following:
   a. Training elements which may refer to applicable requirements (e.g. Part-66, Part-FCL) and which should be tailored to the aircraft type; and
   b. Specific areas of emphasis which are related to the particular aircraft type; and
   c. A minimum duration.
3. Pre-requisites or prior knowledge requirements should be included as part of the minimum syllabus, when applicable. An example is when a reduction on training between types or variants is applied for.

AMC 21A.62(b)(2)
Aircraft reference data to support the qualification of associated simulator

1. The aircraft reference data are composed of ground and flight test data, and data related to aircraft systems and avionics, which are used to confirm that the simulation model reflects the static as well as the dynamic performance characteristics of the aircraft and its systems
2. A validation data roadmap document (VDR) may also be provided. This document should contain guidance material from the aircraft manufacturer recommending the best possible sources of data to be used as validation data in the Qualification Test Guide (QTG). A VDR is particularly important in the case of interim qualification of a simulator for a new aircraft type.
3. The qualification of the associated simulator is used to validate and approve the aircraft reference data as well as to support the validation and approval of the minimum syllabus of pilot type rating training.

AMC 21A.62(b)(3)
Type specific data for cabin crew training

1. Type specific data for cabin crew training should include all information necessary to support the establishment of the aircraft type training programme for cabin crew.

2. This includes but it is not limited to:

   a. Aircraft generic information;

   b. Description of any system relevant to cabin crew operations (e.g. electrical system, communications system, drop-out oxygen system, smoke and fire protection system);

   c. Operations of doors, exits and associated equipment including slides, life-rafts, slide-rafts (when installed) and their applicable limitations;

   d. Type related instructions for normal, abnormal and emergency situations including communication management;

GM 21A.62(c)
Clarification of the term "changes".

The term "changes" includes amendments, deviations, additions and supplements.

GM 21A.65(b)
Information about type of operations

1. The OSC applicant/holder may apply for the approval of different types of operations. If the aircraft is certificated for certain type of operations (e.g. ETOPS, RNP, LVO) the impact on the elements of 21A.62(b) should be addressed.

2. The OSC applicant/holder may wish to apply for the approval of differences training between variants or types to reduce training, checking or currency requirements for operations of more than one type or variant. This is regarded as an optional element in addition to the required elements of 21A.62(b).

GM 21A.69(d)
Operational Suitability Certificate with Limited applicability

There may be a need to make one or several approved elements available before all elements of the OSC can be approved. Therefore, the Agency can approve only one or several elements under an OSC, the use of which is limited to specific purposes.

For example, there may be a need to start training activities before all elements contained in the OSC application can be approved.

GM 21A.75
Clarification on the term of "relevant information".

Relevant information means the documents agreed between the Agency and the OSC applicant used for substantiating compliance with the approval specifications.

GM 21A.79
Criteria for the classification of major and minor changes

1. PURPOSE OF CLASSIFICATION

Classification of changes to any element of an OSC into MAJOR or MINOR is to determine the approval process to be followed in case the OSC's holder holds also a Design Organisation Approval in accordance with Part-21 Subpart J, and has obtained the privilege to classify changes and approve minor changes to the OSC elements.

2 ASSESSMENT OF CHANGE TO OSC ELEMENTS FOR CLASSIFICATION

a. Changes to the elements of the OSC

Alteration to any of the element of an OSC is considered a change to the OSC.

b. Classification Process

21A.79 requires all changes to be classified as either major or minor.

Special attention should be paid to avoid the confusion between the classification of a design change for type certification compliance reasons and the classification of its repercussions on the OSC elements.

Wherever there is doubt as to the classification of a change, the Agency should be consulted for clarification.

Reasons for a classification decision should be recorded and made readably available to Agency staff upon request

c. Complementary guidance for classification of changes.

A change to the elements of 21A.65(b) approved under the operational suitability certificate is judged to have an "appreciable effect on the operation of the aircraft" and therefore should be classified major, in particular but not only, when one or more of the following conditions are met:

(i) Where the change requires an adjustment of the operational suitability certification basis established for the initial OSC in accordance with 21A.67.

(ii) Where the applicant proposes a new interpretation of the applicable certification specifications, that has not been published as AMC material or otherwise agreed with the Agency.

(iii) Where the demonstration of compliance uses methods that have not been previously accepted as appropriate for the nature of the change to the elements of the OSC or for similar changes to OSC elements for other products designed by the applicant.

(v) The change is made mandatory by a directive issued by the Agency (refer to Note 1).

Note 1: The change previously classified minor and approved prior to the directive issuance decision needs no re-classification. However, the Agency retains the right to review the change and re-classify/re-approve if found necessary.

3 EXAMPLES OF CRITERIA FOR CLASSIFICATION OF CHANGES TO THE APPROVED MASTER MINIMUM EQUIPMENT LIST (MMEL)

a. General considerations.

The introduction of a design change into an aircraft can have minor repercussions on the type certification of the aircraft, however the operational repercussions may sometimes be more significant and it is justified to have a more detailed evaluation process with the involvement of the Agency.

b. The following changes to the MMEL are considered major:

(i) Introduction of a new item, unless the item is considered as Non-safety related equipment (as explained CS-MMEL);

(ii) Reduction in the number required for dispatch;

(iii) Increase of Rectification Interval; and

(iv) Item Limitations deletion/alleviation, unless otherwise approved by the Agency.

c. The following changes to the MMEL are considered minor:

(i) Changes to the MMEL applicability for configuration management purposes;

(ii) The proposed change is aligned with changes made to MMEL policy (Annex I to Book 2 of CS-MMEL) when applicable to the aircraft type;

(iii) Deletion of items; however the reasons for the reduction should be provided to the Agency within appropriate timescales;

(iv) Reduction in Rectification Interval; however the reasons for the reduction should be provided to the Agency within appropriate timescales;

(v) In MMEL Item List, change the procedure from (M) to (O) and conversely following a Design Change only if this change does not need additional training for flight operations personnel or maintenance certifying staff to accomplish the task;

(vi) Addition or amendments to a definition in the Preamble section if this definition has already been included as an amendment to CS-MMEL example of preamble;

(vii) Editorial corrections.

Subpart J - Design organisation approval

Insert new AMC 21A.263(c)(8) as follows:

AMC 21A.263(c)(8)
Approval of minor changes to elements of the Operational Suitability Certificate

1. Intent

This AMC provides means to comply with the requirements of Subpart J for organisations that apply for the privileges to classify changes to elements of the Operational Suitability Certificate (OSC) and to approve minor changes to those elements.

This AMC provides means to develop procedures for the classification of changes to elements of the OSC and the approval of minor changes to those elements.

Each DOA applicant should develop its own internal procedures following this AMC, in order to obtain the associated 21A.263(c)(8) privileges.

2. Compliance with the relevant requirements of Subpart J

2.1 Design assurance system (21A.239)

The design assurance system should cover the control and supervision of the classification of changes and the approval of the minor changes to elements of the OSC of the products covered by the application. It should enable the organisation to ensure that minor changes to elements of the OSC comply with the applicable approval specifications.

2.2 Data (21A.243)

The handbook should cover the organisation with regard to the classification of changes to the OSC and approval of minor changes to those elements.

The organisation should also furnish a statement of the qualifications and experience of the management staff and other persons responsible for making decisions regarding the classification of changes to the elements of OSC and approval of minor changes to those elements.

2.3 Approval requirements (21A.245)

The organisation should demonstrate that

a. The staff involved in classification of changes to the OSC and approval of minor changes to those elements are of sufficient numbers and experience and have been given appropriate authority to be able to discharge their allocated responsibilities.

b. There is full and efficient coordination between departments and within departments in respect of operational suitability matters as well as with the departments in charge of approval of minor changes to type design and repairs as appropriate.

2.4 Miscellaneous provisions

Paragraphs 21A.247, 21A.249, 21A.251, 21A.253, 21A.257, 21A.258, 21A.259 and 21A.265 and their AMCs and GM are applicable by analogy to the organisation classifying changes to the elements of the OSC and approving minor changes to those elements and should be taken into account in the relevant procedures.

3. Procedure for the classification of changes to elements of the OSC

3.1. Content of the procedure

The procedure should address the following points:

- document control rules;
- Identification of changes to elements of the OSC
- classification, in compliance with 21A.79 and GMs to 21A.79
- justification of the classification
- authorised signatories

3.2. Identification of changes to elements of the OSC

The procedure should indicate how the following minor changes to elements of the OSC are identified:

- those minor changes to elements of the OSC where additional substantiation data is necessary to show compliance with the applicable certification specification;
- other minor changes to elements of the OSC requiring no further showing of compliance.

3.3. Classification

The procedure should show how the effects on the operation of the aircraft are analysed, from the very beginning, by reference to the applicable requirements, specifications and GM.

3.4. Justification of the classification

All decisions of classification of changes to elements of the OSC as "minor " should be recorded and, for those which are not straightforward in accordance with the GM related to 21A.79, also documented. These records should be easily accessible to the Agency for sample check.

3.5. Authorised signatories

All classifications of changes to type design or repairs should be accepted by an appropriate authorised signatory.

The procedure should indicate the authorised signatories for the various products or elements listed in the terms of approval.

4. Procedure for the approval of minor changes to elements of the OSC

4.1. Content

The procedure should address the following points :

- compliance documentation
- approval under the DOA privilege
- authorised signatories

4.2. Compliance documentation

For those minor changes to elements of the OSC where additional work to show compliance with the applicable CS is necessary, compliance documentation should be established and independently checked as required by 21A.239(b).

The procedure should describe how the compliance documentation is produced and checked.

4.3. Approval under the DOA privilege

4.3.1. For those minor changes to elements of the OSC where additional work to show compliance with the applicable CS is necessary, the procedure should define a document to formalise the approval under the DOA privilege.

This document should include at least :

- identification and brief description of the change and reason for change
- applicable CS and methods of compliance
- reference to the compliance documents
- evidence of the independent checking function of the showing of compliance
- evidence of the approval under the privilege of 21A.263(c)(8) by an authorised signatory
- date of the approval
- date of applicability of the change if this is different from the date of approval.

4.3.2. For the other minor changes to elements of the OSC, the procedure should define a means to identify the change and reasons for the change, and to formalise its approval by the appropriate authority under an authorised signatory. This function should be controlled through appropriate procedures of the DOA holder's design assurance system.

4.4. Authorised signatories

The persons authorised to sign for the approval under the privilege of 21A.263(c)(8) should be identified (name, signature and scope of authority) in appropriate documents that may be linked to the handbook.

B. Proposed Amendment to AMC and GM to Part-M, Part-145, Part-66 and Part-147

I. Part M

The Annex I "Acceptable means of compliance to Part-M" to Decision ED/2003/19/RM of the Executive Director of the Agency of 28 November 2003 is amended as follows:

AMC M.A.202 (a) Occurrence reporting

Accountable persons or organisations should ensure that the (supplemental) type certificate (TC) holder and/or the holder of the (supplemental) Operational Suitability Certificate (OSC) receives adequate reports of occurrences for that aircraft type, to enable it to issue appropriate service instructions and recommendations to all owners or operators.

Liaison with the (supplemental) TC holder and/or the (supplemental) OSC's holder is recommended to establish whether published or proposed service information will resolve the problem or to obtain a solution to a particular problem.

……

The following paragraphs of the AMC/GM to Part-M are amended by adding the words "and safety directives (SD)" each time "airworthiness directives (AD)" are mentioned:

- AMC M.A.201(h) Responsibilities
- AMC M.A.201(h)1 Responsibilities
- AMC M.A.305(d) Aircraft continuing airworthiness record system
- AMC M.A.401(b) Maintenance data
- AMC M.A.501(b) Installation
- AMC M.A.613(a) Component certificate of release to service
- AMC M.A.708(c) Continuing airworthiness management
- AMC M.A.710(a) Airworthiness review
- AMC M.A.801(f) Aircraft certificate of release to service
- AMC M.A.901(d) Aircraft airworthiness review
- AMC M.A.904(a)-2 Airworthiness reviews of aircraft imported into the EU
- AMC M.A.904(b) Airworthiness review of aircraft imported into the EU
- AMC M.B.301(c) Maintenance Programme
- Appendix I to AMC M.A.302 and AMC M.B.301(b): Content of the maintenance programme
- Appendix II to AMC M.A. 201(h)1: Sub-contracting of continuing airworthiness management tasks
- Appendix III to AMC M.B.303(d) ACAM
- Appendix V to AMC M.A.704: Continuing airworthiness management organisation exposition
- Appendix VII to AMC M.B.702(f) EASA Form 13
- Appendix VIII to AMC M.A.616
- Appendix XI to AMC to M.A.708(c): Contracted maintenance
- Appendix XIII to AMC M.A.712(f)

II. Part 145

The Annex II "Acceptable means of compliance to Part-145" to Decision ED/2003/19/RM of the Executive Director of the Agency of 28 November 2003 is amended as follows:

AMC 145.A.35(d) Certifying staff and category B1 and B2 support staff

……

5. The maintenance organisation should monitor the Safety Directives (SD) affecting the minimum syllabus of maintenance certifying staff type rating training issued by the (supplemental) OSC holder. The training resulting from the Safety Directives, if any, should be implemented timely and may be transferred in the content of the continuation training provided that the continuation training schedule fits the mandatory timeframe of these SDs.

The following paragraphs of the AMC/GM to Part-145 are amended by adding the words "and safety directives (SD)" each time "airworthiness directives (AD)" are mentioned:

- AMC 145.A.10 Scope
- AMC 145.A.42(b) Acceptance of components
- AMC 145.A.42(d) Acceptance of components
- AMC 145.A.45(b) Maintenance data
- AMC 145.A.50(a) Certification of maintenance
- AMC 145.A.50(f) Certification of maintenance
- AMC 145.A.70(a) Maintenance organisation exposition
- Appendix II, PART 3: Compliance with 145.A.70 Maintenance organisation exposition

III. Part 66

The Annex III "Acceptable means of compliance to Part-66" to Decision ED/2003/19/RM of the Executive Director of the Agency of 28 November 2003 is amended as follows:

The following paragraphs of the AMC/GM to Part-66 are amended by adding the words "and safety directives (SD)" each time "airworthiness directives (AD)" are mentioned:

- AMC 66.A.20(a) Privileges
- AMC 66.A.45(d) Type/task training and ratings
- Appendix II - Aircraft type practical experience list of tasks / Time limits/Maintenance checks

IV. Part 147

The Annex IV "Acceptable means of compliance to Part-147" to Decision ED/2003/19/RM of the Executive Director of the Agency of 28 November 2003 is amended as follows:

The following paragraph of the AMC/GM to Part-66 is amended by adding the words "and safety directives (SD)" each time "airworthiness directives (AD)" are mentioned:

- AMC 147.A.100(i) Facility requirements