European Union Aviation Safety Agency

Explanatory Note to Decision 2020/019/R

Certification Specifications for Maintenance Certifying Staff Data

'CS-MCSD — Issue 1'

RELATED NPA/CRD: 2018-11 — RMT.0106 (21.039(e))

EXECUTIVE SUMMARY

The objective of Decision 2020/019/R is to improve the level of safety by requiring the applicant for a type certificate (TC) or a restricted type certificate (RTC) of an aircraft to identify the minimum syllabus of the maintenance certifying staff type-rating training, including the determination of the type rating.

The minimum syllabus, together with the requirements contained in Appendix III 'Aircraft type training and examination standard' to Annex III (Part-66) to Commission Regulation (EU) No 1321/2014, shall form the basis for the development and approval of Part-66 type-rating training courses.

Action area:	Systemic safety		
Related rules:	Guidance Material to Annex I (Part 21) to Commission Regulation (EU) No 748/2012 as well as to Annex III (Part-66) and Annex IV (Part-147) to Commission Regulation (EU) No 1321/2014		
Affected stakeholders:	Type certificate holders (TCHs); restricted TCHs (RTCHs); supplemental type certificate holders (STCHs); Part-147 approved maintenance training organisations (AMTOs); national aviation authorities (NAAs); Part-66 licence holders		
Driver:	Safety	**Rulemaking group:**	Yes
Impact assessment:	Yes	**Rulemaking Procedure:**	Standard

28.7.2014	18.9.2018	20.11.2020

Table of contents

1. About this Decision

The European Union Aviation Safety Agency (EASA) developed ED Decision 2020/019/R in line with Regulation (EU) 2018/1139[1] ('Basic Regulation') and the Rulemaking Procedure[2].

This rulemaking activity is included in the European Plan for Aviation Safety (EPAS) for 2020–2024[3] under rulemaking task (RMT).0106 (21.039(e)). The scope and timescales of the task were defined in the related Terms of Reference[4].

The *draft* text of this Decision has been developed by EASA based on the input of Rulemaking Group ToR RMT.0106 (21.039(e)). All interested parties were consulted through Notice of Proposed Amendment (NPA) 2018-11 'Certification Specifications and Guidance Material for maintenance certifying staff type rating training'[5,6].

78 comments were received from all interested parties, including industry, national aviation authorities and social partners.

EASA reviewed the comments received during the public consultation. The comments received and EASA's responses to them are presented in Comment-Response Document (CRD) 2018-11[7].

The *final* text of this Decision with the certification specifications (CSs) / guidance material (GM) has been developed by EASA.

The major milestones of this rulemaking activity are presented on the title page.

1 Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (OJ L 212, 22.8.2018, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1535612134845&uri=CELEX:32018R1139).

2 EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation (EU) 2018/1139. Such a process has been adopted by the EASA Management Board (MB) and is referred to as the 'Rulemaking Procedure'. See MB Decision No 18-2015 of 15 December 2015 replacing Decision 01/2012 concerning the procedure to be applied by EASA for the issuing of opinions, certification specifications and guidance material (http://www.easa.europa.eu/the-agency/management-board/decisions/easa-mb-decision-18-2015-rulemaking-procedure).

3 https://www.easa.europa.eu/document-library/general-publications/european-plan-aviation-safety-2020-2024

4 https://www.easa.europa.eu/document-library/terms-of-reference-and-group-compositions/tor-rmt0106-21039e

5 In accordance with Article 115 of Regulation (EU) 2018/1139, and Articles 6(3) and 7 of the Rulemaking Procedure.

6 https://www.easa.europa.eu/document-library/notices-of-proposed-amendment/npa-2018-11

7 https://www.easa.europa.eu/document-library/comment-response-documents

2. In summary — why and what

2.1. Why we need to issue CSs and GM

Article 19 of Regulation (EU) 2018/1139 empowers the European Commission to adopt delegated acts, in accordance with Article 128, that lay down detailed rules with regard to the conditions for establishing and notifying to an applicant by EASA the type-certification basis applicable to a product for the purposes of the approval of the operational suitability data (OSD), including the minimum syllabus of the maintenance certifying staff (MCS) type-rating training. The rules on the detailed conditions for the establishment of the OSD certification basis by EASA are laid down in Annex I (Part 21) to Commission Regulation (EU) No 748/2012[8].

The minimum syllabus, together with the determination of the type rating, constitute the OSD that training organisations (TOs) shall use to develop the complete type-rating course. Without the specific elements provided by the TCH, the relevant information on the aircraft type may be missing in the final type-rating course. This gap may have a negative impact on the safety of the operation of the aircraft, resulting in incidents/accidents caused by maintenance errors due to inadequate training. The operational suitability data for maintenance certifying staff (OSD-MCS) establishes also a standard for the type-rating training that is delivered by Part-147 TOs.

The main objective of CS-MCSD is the definition of the content of the minimum syllabus.

2.2. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. The specific objectives are to:

— improve the level of safety as regards the minimum syllabus of the maintenance certifying staff type-rating training by enabling Part 21 design approval holders (DAHs) to identify the technical elements necessary to train maintenance certifying staff involved in the maintenance of their products; and

— ensure an adequate minimum syllabus standard at EASA Part-147 TO level.

2.3. How we want to achieve it — overview of CS-MCSD Issue 1

The discussions at RMT.0106 Rulemaking Group level have been lengthy and intense due to the different ideas and interests as regards OSD-MCS. The group of experts expressed different and dissenting opinions on the definition of the minimum syllabus, i.e. the content of the four-box OSD concept (mandatory and non-mandatory contents). This provided input for the two principal options:

— 'Light OSD' (minimal approach): the TCH provides only a minimal contribution, limited to the identification of the aircraft maintenance areas of special emphasis (MASE).

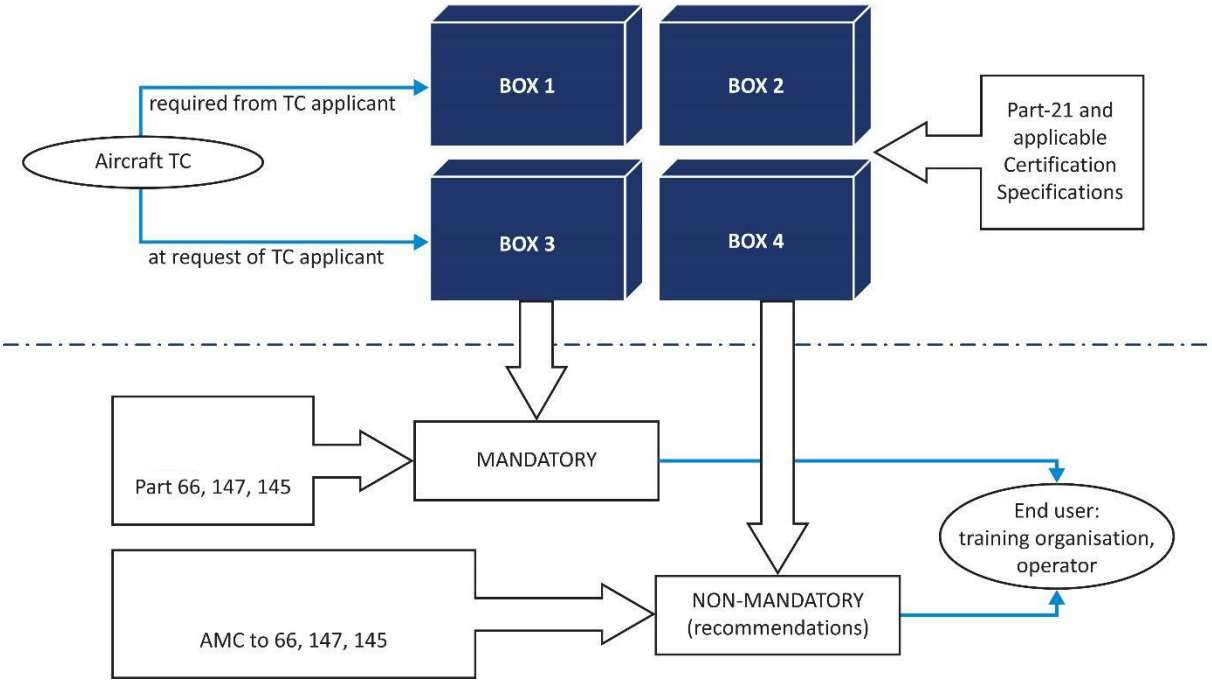
— 'Large OSD' (full type-rating training): OSD-MCS shall be, de facto, the type-rating training.

In parallel, certification memorandum CM-MCSD-01, tested in the few ongoing OSD-MCS applications, suggested a third balanced and intermediate option that has been improved and adopted for

[8] Commission Regulation (EU) No 748/2012 of 3 August 2012 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 224, 21.8.2012, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1602085545857&uri=CELEX:32012R0748).

CS-MCSD. While this option requires the TCH to provide those training elements that are descriptive of the specific type design, it leaves room for Part-147 MTOs to develop the training according to their capacity/ability. The selection of the training organisational elements are left to the MTO (e.g. training objectives, training levels, duration, hours per day, didactical material, computer-based training, flight simulator training devices).

In synthesis, the minimum syllabus content, as schematised in Part 21 (GM 21.A.15):



…is represented by the following:

BOX 1	**BOX 2**
— Aircraft maintenance configuration — Minimum list of practical tasks — Maintenance areas of special emphasis (MASE)	References (literature) to new technologies. For designs that include new technologies, materials and systems not covered by the basic training, the applicant should provide the relevant information necessary to develop the training and fill the gap.
BOX 3	**BOX 4**
Any element that the applicant considers should be part of the syllabus because there are no alternate means to comply with, e.g.: — training levels and learning objectives; — logical training sequence; — student prerequisites; — optional systems; — MS differences between the base aircraft and another aircraft of the same manufacturer.	Any elements (i.e. in addition to and beyond the Box 1, Box 2 and Box 3 contents) which the applicant recommends to the end user, e.g.: — training modes and methods, flight simulation training devices; — supplemental courses (troubleshooting, structure repairs, engine runs, etc.).

For more details and for the full text of CS-MCSD Issue 1, please refer to the Annex to the Decision.

2.4. What are the stakeholders' views

The balanced option formulated in the NPA has received positive comments by all commentators with the exception of AIRBUS (aeroplanes), which believes that CS-MCSD may create a negative economic

impact on its training business model because it will be required to make its know-how publicly available to its competitors.

Please refer to Comment-Response Document (CRD) 2018-11 for the detailed comments and responses.

2.5. What are the benefits and drawbacks

CS-MCSD would enhance safety and mitigate the risk related to maintenance errors due to inadequate training. In particular, it would:

— establish the same level of standard for the type-rating training concerned among the training organisations;

— facilitate the approval of type-rating training by NAAs;

— provide appropriate content and references for an easy integration with the requirements of Appendix III to Annex III (Part-66);

— leave room for end users (i.e. training organisations) to develop the complete and final type-rating training according to their local organisation capability; and

— give TCHs the opportunity to voluntarily recommend more training elements.

3. How do we monitor and evaluate the rules

Through the collection and analysis of the OSD-MCS experts' feedback on the use of CS-MCSD in practical applications.

4. References

4.1. Affected decisions

— Decision N^{o} 2012/020/R of the Executive Director of the Agency of 30th October 2012 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'), repealing Decision No 2003/01/RM of the Executive Director of the Agency of 17 October 2003

— Executive Director Decision 2016/007/R of 25 April 2016 amending acceptable means of compliance and guidance material to Part-21 of Regulation (EU) No 748/2012 ('AMC & GM to Part-21 — Issue 2, Amendment 6' — 'Changes to operational suitability data (OSD))'

4.2. Other reference documents

— Appendix III to Annex III (Part-66) to Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1), and its subsequent amendments

— Annex IV (Part-147) to Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1), and its subsequent amendments

5. Appendix

— **CRD to NPA 2018-11** *Certification Specifications and Guidance Material for maintenance certifying staff type rating training* (RMT.0106 (21.039(e)))[9]

[9] Published as a separate document at https://www.easa.europa.eu/document-library/comment-response-documents.