European Aviation Safety Agency

Explanatory Note to Decision 2014/005/R

Certification Specifications — Generic Master Minimum Equipment List

RELATED NPA/CRD 2012-09 — RMT.0109 (21.039(J)) — 31.01.2014

EXECUTIVE SUMMARY

This Decision addresses a safety issue related to Operational Suitability Data (OSD) — Master Minimum Equipment List (MMEL) as required by an amendment to Commission Regulation (EU) No 748/2012 of 3 August 2012 laying down implementing rules for airworthiness and environmental certification of aircraft and related products, parts an appliances, as well as for the certification of design and production organisations.

The specific objective is to achieve a high level of safety by providing end users (National Aviation Authorities, operators) with access to a safe and reliable Master Minimum Equipment List data by providing the Type Certificate Holders with a uniform process and criteria for developing aircraft type specific MMEL data and allow its approval along with the other airworthiness certification activities.

Moreover, in accordance with the additional requirements for air operations for commercial purposes laid down in Annex IV to Article 8 of the Basic Regulation, an operator must establish a Minimum Equipment List (MEL) or equivalent document based on the Master Minimum Equipment List (MMEL).

This requirement for commercial operations has been transposed in the Implementing Rules for Air Operations, namely in Part ORO. The possibility of establishing an MEL on a voluntary basis for non-commercial operations of other-than-complex motor-powered aeroplanes has been also foreseen in the Implementing Rules for Air Operations in Part-NCO.

Following these considerations, the Agency introduces with this Decision the CS-GENERIC-MMEL for other-than-complex motor-powered aeroplanes with the aim of assisting the type certificate holder in developing the Master Minimum Equipment List (MMEL).

Applicability		**Process map**	
Affected regulations and decisions:	Commission Regulation (EU) No 748/2012	Terms of Reference:	13.9.2007
		Concept Paper:	No
		Rulemaking subgroup:	Yes
Affected stakeholders:	Manufacturers, TC/STC holders, Air Operators	RIA type:	Light
		Technical consultation during NPA drafting:	No
Driver/origin:	Regulation (EC) No 216/2008	Publication date of the NPA:	16.8.2012
Reference:		Duration of NPA consultation:	3 months
		Review group:	Yes
		Focussed consultation:	No

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1. Procedural information

1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed ED Decision 2014/005/R in line with Regulation (EC) No 216/2008[1] and the Rulemaking Procedure[2].

This rulemaking activity is included in the Agency's Rulemaking Programme for 2013 under RMT.0109 (21.039(j)). The scope and timescale of the task were defined in the Terms of Reference (ToR) RMT.0110 (21.039).

The draft text of this Decision has been developed by the Agency based on the input of the GENERIC MMEL deriving from the core rulemaking group RMT.0110 (21.039). All interested parties were consulted through NPA 2012-09[3]. The Agency received 85 comments from interested parties, including industry, national aviation authorities, professional organisations and private companies.

The Agency, has carefully reviewed the comments received on the NPA. The comments received and the Agency's responses are presented in the Comment-Response Document (CRD) 2012-09[4]. The CRD was published on 22 August 2013 and the reaction period ended on 22 October 2013.

The final text of this Decision with the Certification Specifications (CS) and Guidance Material (GM) has been developed by the Agency. The changes to the text as compared to the CRD are described in the following paragraphs.

The process map on the title page summarises the major milestones of this rulemaking activity.

1.2. Structure of the related documents

Certification Specifications – Minimum Equipment List is structured into two books.

Book 1 contains the Certification Specifications and related Appendices, addressing.the scope and applicability of the CS-GEN-MMEL, definitions related to the terminology used within the CS-GEN-MMEL, the purpose of the MMEL its format and content.

Book 2 contains Guidance Material (GM) associated to the CS-GEN-MMEL paragraphs of Book 1.

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1 Regulation (EC) No 216/2008 of the European Parliament and 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), Regulation as last amended by Commission Regulation (EU) 69/2014 of 27 January 2014 (OJ L 23, 28.1.2014, p. 12).

2 The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See Management Board Decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure), EASA MB Decision No 01-2012 of 13 March 2012.

3 http://easa.europa.eu/rulemaking/docs/npa/2012/NPA%202012-09.pdf

4 http://easa.europa.eu/rulemaking/docs/crd/2012/CRD%202012-09.pdf

2. Explanatory Note

This ED Decision contains Certification Specifications for Generic Master Minimum Equipment List to facilitate the implementation of Regulation (EU) No 69/2014[5] Operational suitability data.

2.1. Overview of the issues to be addressed

1. The Basic Regulation gives the Agency's responsibility to approve relevant information necessary for the safe operation of a specific aircraft type. This information relates to type specific elements for pilots, cabin crew, and maintenance, and includes the Master Minimum Equipment List (MMEL) and Flight Synthetic Training Devices (FSTD). The information is to be concluded and approved under Operational Suitability Data (OSD) that will complement the TC or STC. The applicant for an aircraft type certificate or supplemental type certificate will obtain approval of operational suitability data before the aircraft is operated by a European Union operator. Once the OSD is issued, the approved elements will be used by the operators of the particular aircraft type or training organisations to establish the appropriate training programmes or MEL.
2. RMT.0109 (21.039(j)) was set up to develop the Implementing Rules, associated Certification Specifications, Acceptable Means of Compliance and Guidance Material for the existing Joint Operational Evaluation Board (JOEB) tasks to be transferred into the new EASA regulatory framework. 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 and further creating subgroups for the development of the individual CSs such as CS-GENERIC-MMEL.
3. A GENERIC MMEL subgroup was created by the main group to address the MMEL task, and members of the main group were invited to participate or nominate participants in this subgroup activity. The subgroup members came from European and foreign Original Equipment Manufacturers (OEMs) and European NAAs.
4. The GENERIC MMEL subgroup was tasked with taking the current Guidance Material in the field of MMEL, NPA CS-MMEL, FAA Single Engine Airplanes MMEL and TCCA MMEL Guidance Book and use it as far as possible to create the CS-GENERIC-MMEL.
5. The subgroup went through the proposed text based on the reference material. In particular, the discussions emphasised on the level of relief to be given to operators under Part NCO (rules for non-commercial operations) and Part SPO (rules for commercial and non-commercial specialised operations) which had to guarantee the highest safety level possible without imposing too much burden. The subgroup also acknowledged that the CS text should be the simplest possible with the most straightforward application as the vast majority of the applicants would be unfamiliar with the notion of MMEL.
6. In addition to that, consideration has been given to help further harmonisation, ensure a level playing field between applicants, safety considerations, new complex and highly integrated designs and airworthiness considerations. The outcome of this work has been the basis for the current proposal.
7. The Agency acknowledged that although the draft GENERIC MMEL is suitable for many aircraft in the other-than-complex category, it is not well tailored to the real leisure aircraft such as very light aeroplanes (VLA), light sport aeroplanes (LSA), very

[5] Commission Regulation (EU) No 69/2014 of 27 January 2014 amending Regulation (EU) No 748/2012 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 23, 28.1.2014, p 12).

light rotorcraft (VLR), sailplanes, powered sailplanes, balloons and ELA2 airships. So, for these aircraft, another approach is proposed to deal with the requirement to establish an MMEL. For these aircraft, the Agency considers that the list of required equipment as included in the Type Certificate Data Sheets (TCDS) or in the approved Aircraft Flight Manual (AFM) Section 2 Limitations, in combination with equipment required for the flight by the associated operational implementing rules and by the airspace rules, establishes the list of equipment (and quantity) that must be operative for the intended kind of operation (VFR day, VFR night, IFR, flight into known icing conditions, etc.). Other equipment may be inoperative and this constitutes the MMEL. Design approval applicants for these aircraft will, therefore, not be required to establish an MMEL. This principle is proposed to be included in Guidance Material to Part 21, in relation to the requirement to establish an MMEL.

8. Specification of the minimum target level of safety applicable for the MMEL and the means to ensure the proposed candidate items for MMEL meet this target.

9. Retaining commonality with the previous JAR-based process and criteria in order to limit the economic impact of process variations at Type Certificate Holders level while accounting for potential benefits at end-user level (Operator's) of some extensions of the scope of the MMEL.

10. As far as practicable, provision of means for replacing former JAA Temporary Guidance Leaflet No26 'Guidance Document for MEL Policy' with regard to alleviations on equipment installation operational requirements.

2.2. Objectives

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Chapter 2. The specific objective of this proposal is, therefore:

1. to establish high and uniform level of safety when dispatching an aircraft with known inoperative items under Minimum equipment List (MEL) by providing adequate specifications for the target level of safety to be demonstrated by the Type Certificate Holder at the level of the aircraft type MMEL. This includes the improvement of the criteria related to quantitative safety assessments consistent with the Aviation Rulemaking Advisory Committee/Airplane-level Safety Analysis Working Group (ARAC/ASAWG) recommendations.

2. to promote cost-efficiency in the regulatory processes by avoiding duplication of MMEL approval at national level. This objective integrates the continuation of Joint Aviation Authorities (JAA) Joint Operations Evaluation Board (JOEB) that promoted uniformity across National Aviation Authorities (NAAs) and the JAA Temporary Guidance Leaflet No 26 'Guidance Document for MEL Policy', as far as practicable in the new regulatory context.

2.3. Outcome of the reaction period to the CRD

Comments were received by one national aviation authority, one TC holder and one private company.

2.4. Summary of the Regulatory Impact Assessment (RIA)

The objective of this rulemaking activity resulting in this Decision is the same with the objective laid down in the regulatory impact assessment of NPA 2012-09. Therefore, the impact assessment of the potential options for achieving the objectives is analysed in that NPA and only summarised in the present Explanatory Note.

Safety impact

CS-GEN-MMEL for other-than-complex aeroplanes derived from the CS-MMEL, and harmonised with similar guidance material from foreign authorities, it provides proportionate requirements which ensure that operators can define MEL with an adequate level of safety. The CS is adapted to General Aviation and would give the relief needed while maintaining an adequate level of safety.

Economic impact

The use of CS-GEN-MMEL for other-than-complex aeroplanes limit greatly for industry the additional costs of generating an MMEL, as the MMEL guidance would give in a straightforward manner the authorised MMEL items.

Impact on regulatory coordination and harmonisation

CS-GEN-MMEL is harmonised with the existing FAA generic MMEL document on single engine aeroplanes.

3. References

3.1. Related regulations

Regulation (EU) No 69/2014 on Operational suitability data.

3.2. Affected decisions

This proposal is a newly developed ED Decision.

3.3. Reference documents

— Commission Regulation (EU) No 965/2012[6]

— ED Decision 2012/017/R

[6] Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L296, 25 October 2012, page 1). Regulation as last amended by Commission Regulation (EU) No 71/2014 of 27 January 2014 (OJ L23, 28.1.2014, p 27).