European Aviation Safety Agency

Opinion No 05/2015

B2L and L Part-66 aircraft maintenance licences

RELATED NPA/CRD 2012-15 — RMT.0135 (66.027) — 22.6.2015

EXECUTIVE SUMMARY

Article 7(8) of Regulation (EU) No 1321/2014 reads: 'The Agency shall submit an Opinion to the Commission including proposals for a simple and proportionate system for the licensing of certifying staff involved in the maintenance of ELA1 aeroplanes as well as aircraft other than aeroplanes and helicopters'.

In addition thereto, it was requested by industry to simplify the Part-66 avionics licence by adapting it to the lower complexity of light aircraft.

Both subjects are presented in this Opinion in the form of:

— a progressive B2L licence for the licensing of personnel involved in the maintenance of avionics and electrical systems for aircraft other than those in the group of complex aircraft. This B2L licence has the particularity of being created with the concept of 'avionics systems ratings'; and

— an L licence for the licensing of personnel involved in the maintenance of ELA1 aeroplanes, as well as aircraft other than aeroplanes and helicopters, who are currently qualified following national rules.

Applicability	
Affected regulations and decisions:	Commission Regulation (EU) No 1321/2014; Annex I (Part-M); Annex II (Part-145); Annex III (Part-66); Annex IV (Part-147); and related AMC/GM.
Affected stakeholders:	Certifying and support staff of maintenance organisations; competent authorities; Part-147 Approved Training Organisations.
Driver/origin:	Article 7(9) of Regulation (EC) No 2042/2003 (new Article 7(8) of Regulation (EU) No 1321/2014); efficiency/proportionality (B2L licence); and level playing field (L licence).
Reference:	N/A.

Process map	
Terms of Reference (ToR)	15.4.2011
Concept Paper:	No
Rulemaking group:	Yes
RIA type:	Full
Technical consultation during NPA drafting:	No
Publication date of the NPA:	4.10.2012
Duration of NPA consultation:	3 months
Review group:	Yes
Focussed consultation:	Yes
Publication date of the Opinion:	2015/Q2
Publication date of the Decision:	2016/Q4

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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 this Opinion in line with Regulation (EC) No 216/2008[1] (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure[2].

This rulemaking activity is included in the Agency's 4-year Rulemaking Programme under RMT.0135 (66.027). The scope and timescale of the task were defined in the related Terms of Reference (see process map on the title page).

The draft text of this Opinion has been developed by the Agency based on the input of the Rulemaking Groups RMT.0135 (66.027). All interested parties were consulted through NPA 2012-15[3]. 124 comments were received from individuals, flying sports clubs/associations, an association of avionics components maintainers, training organisations, an association of sailplane manufacturers, National Aviation Authorities (NAAs) and an airship manufacturer.

The Agency has addressed and responded to the comments received on the NPA. The comments received and the Agency's responses thereto are presented in the Comment-Response Document (CRD) 2012-15[4].

The final text of this Opinion (i.e. Explanatory Note and draft regulation) has been developed by the Agency based on the input of the Review Group RMT.0135 (66.027) and the focussed consultation. The draft rule text proposed by the Agency is published on the Agency's website[5].

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

1.2. The structure of this Opinion and related documents

Chapter 1 of this Opinion contains the procedural information related to this task.

Chapter 2 'Explanatory Note' summarises the Regulatory Impact Assessment and explains the core technical content.

1.3. The next steps in the procedure

This Opinion contains proposed changes to European Union regulations. It is addressed to the European Commission to be used as a technical basis in order to prepare a legislative proposal.

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1 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).

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 2013.

3 In accordance with Article 52 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.

4 http://easa.europa.eu/document-library/comment-response-documents

5 http://easa.europa.eu/document-library/opinions

For information, the Agency published in the Comment-Response Document (CRD) 2012-15 the draft AMC/GM. The final Decision adopting the AMC/GM will be published by the Agency once the European Commission/Parliament and the Council have adopted the related Implementing Rule(s).

2. Explanatory Note

2.1. Issues to be addressed

Two different issues are addressed by this Opinion:

(a) The current Part-66 licensing system for maintenance of avionics and electrical systems is not adapted to the lower complexity of light aircraft. In particular:

(1) a significant amount of the material applicable to the current Part-66 B2 licence is not relevant to General Aviation (GA) aircraft.

(2) new engineers performing self-study have been reported to have serious difficulties in passing the exams for module 13, since they do not have any experience in the complex systems applicable to larger aircraft.

(3) it is too expensive for GA organisations to send their maintenance personnel to a Part-147 Approved Training Organisation (ATO) in order to attend the 2 400 hours B2 Basic Course, taking moreover into account that, once this personnel obtain the B2 licence, they are likely to leave the GA sector in favour of airlines and large maintenance organisations.

(4) This problem may not have been very serious over the past years as most of the avionics engineers have been working with licences converted from their previous national qualifications. However, as these engineers are steadily reaching the retirement age, the number of engineers is decreasing in the GA sector.

(b) Currently, there is no common European licensing system for maintenance personnel involved in the maintenance of aircraft other than aeroplanes and helicopters while at the same time the existing Part-66 B1.2 and B3 licensing system is still too complex for ELA1 aeroplanes.

In order to resolve this issue, a new point (9) was included into Article 7 of Regulation (EU) No 1149/2011[6], stating that 'the Agency shall submit an opinion to the Commission including proposals for a simple and proportionate system for the licensing of certifying staff involved in the maintenance of ELA1 aeroplanes as well as aircraft other than aeroplanes and helicopters'.

This requirement has been transferred to point (5) of Article 8 of Regulation (EU) No 1321/2014[7].

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 objectives of this proposal are the following:

(a) to adapt the current licensing requirements for maintenance of avionics and electrical systems (the existing B2 licence) to the lower complexity of light aircraft; and

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[6] Commission Regulation (EU) No 1149/2011 of 21 October 2011 amending Regulation (EC) No 2042/2003 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 298, 16.11.20114, p. 1).

[7] 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).

(b) to propose a simple and proportionate system for the licensing of certifying staff involved in the maintenance of aircraft other than aeroplanes and helicopters and of ELA1 aeroplanes.

2.3. Outcome of the consultation

Please refer to CRD 2012-15 published on the Agency's website.

2.4. Summary of the Regulatory Impact Assessment

(a) Subject 1: Adapt the current licensing requirements for maintenance of avionics and electrical systems to the lower complexity of light aircraft.

(1) Safety impact

The training level for each of the B2L licence subjects is the same as for the B2 licence ones. The sole difference is that only those subjects which are applicable to this aircraft category have been retained and rearranged according to the concept of system ratings. This ensures that the level of safety is not reduced compared to the one achieved by the B2 licence.

In addition, the proposed system should allow the GA community to have access to a higher number of licensed engineers, reducing the potential safety risk created by understaffed situations.

(2) Social impact

This proposal should help young people obtain a technical qualification and gain access to an employment in a technologically advanced industry, thus potentially reducing unemployment rates within this community.

This should also contribute to normalising the employment curves for avionics engineers within the GA industry and, therefore, promote the activities of this sector.

In addition, this may also increase the employment opportunities in Part-147 ATOs, due to the increased need for development and delivery of courses for the B2L licence.

(3) Economic impact

Facilitating the access to a Part-66 licence (B2L) should help the licence holder have better employment opportunities and likely increase their income.

For the organisation and/or an individual funding the training, this represents a lower initial financial investment.

For the GA maintenance organisations, increasing their access to appropriately licensed personnel should also lead to increasing their business activity. In addition, the employment costs for a B2L licence holder may be lower than for a full B2 licence holder.

For the GA owners and operators, there is the potential to stabilise their maintenance costs.

This may also provide the Part-147 ATOs with some better training opportunities.

This proposal will require the National Aviation Authorities (NAAs) to modify their licensing procedures and software, as well as the examination management system, which may create additional costs.

(4) Environmental impact

Any encouragement of the GA activities may have an impact on the environment by modifying the number of flight hours and hence the amount of emissions produced. This requires, however, to evaluate the flight trends in the years following the introduction of these licences.

(5) Proportionality issues

This proposal ensures that the licensing requirements are proportional to the aircraft complexity, allowing the GA community access to simplified licences.

(6) Impact on regulatory coordination and harmonisation

No impact on bilateral agreements with international partners is envisaged.

(b) Subject 2: Propose a simple and proportionate system for the licensing of certifying staff involved in the maintenance of aircraft other than aeroplanes and helicopters and of ELA1 aeroplanes.

(1) Safety impact

Although no Europe-wide statistics are available in the field of GA, the introduction of a common qualification standard should have a positive impact on safety, at least in those Member States (MSs) with poor qualification standards or no qualification standards at all.

(2) Economic and social impact

The conversion provisions introduced in the proposal ensure that existing personnel qualified under national rules would retain their current privileges and would automatically obtain the corresponding Part-66 L licence upon application.

New staff would have to apply for the licence, but the costs and difficulty should be minimal since:

— no training is required; and

— examinations can be conducted not only by Part-147 ATOs and Competent Authorities (CAs), but also by any organisation (such as an aeroclub, an association or a manufacturer) if agreed by the CA.

Note: There may still be differences between MSs due to the different fees imposed by each of the CAs when issuing the licence.

Furthermore, there would be the additional economic and social benefit of allowing the licence holders to freely circulate in the EU and perform maintenance on any EU-registered aircraft applicable to their licence category. On the other hand, some national associations currently issuing certifying staff privileges to their members, which are valid only while their members remain in that association, may see some of these members leave the association once they obtain the L licence due to the free circulation.

In addition, the L licence holders will be eligible for two additional privileges which are linked to two ongoing rulemaking activities:

— the possibility to perform standard changes and repairs in accordance with the new CS-STAN (RMT.0245 (MDM.048)) on aircraft registered in any EU MS; and

— the possibility to perform airworthiness reviews and issue the Aircraft airworthiness Review Certificate (ARC) at the same time as the annual/100 hours' inspection for any EU-registered aircraft within the scope of their licence category (current rulemaking task RMT.0547 creating a simplified Part-M for the lower end of GA).

(3) Environmental impact

No environmental impact is anticipated.

(4) Proportionality issues

This proposal ensures that the licensing requirements are proportional to the aircraft complexity.

(5) **Impact on regulatory coordination and harmonisation**

The introduction of a common licensing system for this aircraft category ensures a uniform level of standardisation in the EU and promotes the free circulation of maintenance personnel.

No impact on bilateral agreements with international partners is envisaged.

2.5. Overview of the proposed amendments

(a) Subject 1: Adapt the current licensing requirements for maintenance of avionics and electrical systems to the lower complexity of light aircraft.

(1) There is a delayed application date of 6 months after adoption of the Regulation by the Commission in order for the NAAs to adapt their procedures and templates to the new B2L licences.

(2) The B2L licence is applicable to all aircraft other than those in Group 1 and is divided into the following 'system ratings':

(i) communication/navigation (com/nav);

(ii) instruments;

(iii) autoflight;

(iv) surveillance; and

(v) airframe systems.

Note: Point 66.A.5 has been amended in order to provide the Agency the possibility to classify into Group 2, Group 3 or Group 4, as appropriate, an aircraft which meets the conditions of Group 1, if the Agency finds that the lower complexity of the particular aircraft justifies so. In such a case, the Agency will indicate it in the list of type ratings contained in Appendix I to AMC to Part-66.

(3) The B2L licence shall contain, as a minimum, one system rating. Any combination of ratings can be applied for by the applicant.

(4) The B2L licence permits the holder to issue certificates of release to service and to act as B2L support staff for the following:

(i) maintenance performed on electrical systems;

(ii) maintenance performed on avionics systems within the limits of the system ratings specifically endorsed on the licence; and

(iii) when holding the 'airframe system' rating, the performance of electrical and avionics tasks within power plant and mechanical systems, requiring simple tests to prove their serviceability.

(5) The 'Basic knowledge' modules (1 through 10) in Appendix I to Part-66 for the B2L licence are identical to those for the B2 licence.

(6) The 'Basic knowledge' modules 13 and 14 in Appendix I to Part-66 have been rearranged and adapted to the new system ratings and to the lower aircraft complexity.

(7) The basic-experience requirements are the following:

(i) one- to three-year experience depending on the previous background (Part-147 training, skilled worker training, no technical training); and

(ii) three-month additional experience for each one of the new system rating.

(8) The relevant aircraft ratings are the following:

(i) for Group 2 aircraft, manufacturer subgroup rating or full subgroup rating;

(ii) for Group 3 aircraft, full group rating; and

(iii) for Group 4 aircraft, full group rating.

(b) Subject 2: Propose a simple and proportionate system for the licensing of certifying staff involved in the maintenance of aircraft other than aeroplanes and helicopters and of ELA1 aeroplanes.

(1) The CAs will not have the obligation to start issuing L licences (opt-out) until 28 September 2018 (approximately 18 months after adoption of the Regulation by the Commission).

(2) Individuals and organisations will not have the obligation to use L licences (opt-out) until 28 September 2019.

(3) The L licence is applicable to:

(i) ELA1 aeroplanes (they belong to Group 3 in 66.A.5); and

(ii) all sailplanes, balloons and airships (Group 4 in 66.A.5, except airships above ELA2 which are classified into Group 1)

(4) The L licence has the following subcategories:

(i) L1C: composite sailplanes;

(ii) L1: sailplanes;

(iii) L2C: composite powered sailplanes and composite ELA1 aeroplanes;

(iv) L2: powered sailplanes and ELA1 aeroplanes;

(v) L3H: hot-air balloons;

(vi) L3G: gas balloons;

(vii) L4H: hot-air airships;

(viii) L4G: ELA2 gas airships; and

(x) L5: gas airships above ELA2 (they belong to Group 1 and require individual ratings).

(5) The L licence permits the holder to issue certificates of 'release to service' and to act as L support staff for the following:

(iv) maintenance performed on aircraft structure, power plant and mechanical and electrical systems;

(v) work on radio and transponder systems; and

(vi) work on other avionics systems requiring simple tests to prove their serviceability.

(6) Subcategory L2 includes subcategory L1. Any limitation to subcategory L2 becomes also applicable to subcategory L1.

(7) Subcategory L2C includes subcategory L1C.

(8) No basic training is required (only examination). Basic knowledge examinations can be conducted by a Part-147 ATO, by the CA or at any other location/organisation (for example an aeroclub, an association or a manufacturer) if agreed by the CA.

(9) The new Appendix VII defines the basic knowledge requirements for the different subcategories (with respect to the examination).

In the case of the L5 licence for gas airships above ELA2 (Group 1), in addition to certain specific modules contained in Appendix VII, it is required to meet the basic knowledge requirements for a B1 or B2 licence.

(10) The new Appendix VIII defines the basic examination standard for each of the L licence subcategories.

(11) The basic experience requirements are the following:

(i) One-year experience in order to obtain all privileges with the following limitations:

(A) complex maintenance tasks (Appendix VII to Part-M);

(B) standard changes (21.A.90B);

(C) standard repairs (21.A.431B); and

(ii) Two-year relevant experience in order to obtain full privileges (without limitations).

(12) The relevant aircraft ratings are the following:

(i) for L1C: 'composite sailplanes;'

(ii) for L1: 'sailplanes';

(iii) for L2C: 'composite powered sailplanes and composite ELA1 aeroplanes';

(iv) for L2: 'powered sailplanes and ELA1 aeroplanes';

(v) for L3H: 'hot-air balloons';

(vi) for L3G: 'gas balloons';

(vii) for L4H: 'hot-air airships';

(viii) for L4G: 'ELA2 gas airships'; and

(ix) for L5: the appropriate airship type rating (they belong to Group 1).

All ratings, except L5, are obtained based on experience. For L5, the individual type rating is obtained through type training approved by the CA.

(13) Limitations (due to missing basic examinations or basic experience):

(i) for ELA1 aeroplanes, sailplanes and powered sailplanes:

(A) wooden-structure aircraft;

(B) aircraft with metal-tubing structure covered with fabric;

(C) metal-structure aircraft;

(D) composite-structure aircraft; and

(ii) for gas balloons:

other than ELA1 gas balloons.

(14) Conversions of national qualifications are performed in accordance with 66.A.70(d). In particular:

(i) they are based on a conversion of privileges, without comparing with the Part-66 syllabus;

(ii) they are possible for qualifications obtained before the applicability date of the amended EU Regulation (28 September 2018 as proposed in the Opinion); and

(iii) limitations must be introduced in order to maintain the previous privileges.

Done at Cologne, 19.6.2015

Patrick Ky
Executive Director

3. References

3.1. Affected regulations

Commission Regulation (EU) No 1321/2014 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).

3.2. Affected decisions

Decision No. 2003/19/RM of the Executive Director of the Agency of 28 November 2003 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks, as amended.

3.3. Reference documents

N/A.