European Union Aviation Safety Agency

Notice of Proposed Amendment 2024-08 (D)

in accordance with Article 6 of MB Decision 01-2022

Proposed amendments to Commission Regulation (EU) No 1321/2014 (continuing airworthiness)

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Proposed regulatory material

The text of the amendment is arranged to show deleted, new or amended, and unchanged text as follows:

- deleted text is ~~struck through~~;
- new or amended text is highlighted in blue;
- an ellipsis '[…]' indicates that the rest of the text is unchanged.

Draft regulation (draft EASA opinion)

Commission Regulation (EU) No 1321/2014 is amended as follows:

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

[…]

Article 2 Definitions

[…]

(u) […]

(v) 'licence' means a document in physical or electronic format issued in accordance with this Regulation and entitling its lawful holder to exercise the privileges associated with the categories and ratings contained therein;

(w) 'licence issued in physical format' means a licence issued on paper or other suitable material, including plastic cards;

(x) 'licence issued in electronic format' means a licence issued on a self-contained mobile electronic visual display device. A licence issued in electronic format may be referred to as an 'electronic personnel licence';

(y) 'self-contained mobile electronic visual display device' means a device such as a mobile phone, tablet, or other mobile device which enables the generation and verification of the authenticity and validity of a licence issued in electronic format;

(z) 'electronic personnel licence system' means an integrated system comprised of the computer hardware, network and communication facilities, computer software, validated data, users, and the associated regulatory framework to enable the issuance of licences in electronic format and the conduct of verification activities.

ANNEX II (PART-145)

AMC1 145.A.30(e) Personnel requirements

COMPETENCY ASSESSMENT OBJECTIVES

[…]

A record should be kept of each individual's qualifications and competency assessment (refer also to point 145.A.55(d)). This should include access to data and copies of all documents that attest to their qualifications, such as a licence and/or any authorisation held, as applicable.

[…]

AMC1 145.A.70(a) Maintenance organisation exposition (MOE)

[…]

3.21 ~~Procedure for the issue of a recommendation to the competent authority for the issue of a Part-66 licence in accordance with point 66.B.105 (limited to the case where the competent authority for the Part-145 approval and for the Part-66 licence is the same).~~

~~3.22~~ Management system record-keeping

[…]

Appendix II to AMC2 145.B.310(c) — EASA Form 6

[…]

Part-145 APPROVAL RECOMMENDATION REPORT		EASA FORM 6
Part 3: Compliance with 145.A.70 Maintenance organisation exposition (MOE) Please either tick (√) the box if satisfied with compliance, or cross (X) if not satisfied with compliance and specify the reference of the Part 4 finding, or enter 'N/A' where an item is not applicable, or 'N/R' when applicable but not reviewed.		
[…]		
~~3.21~~		~~Procedure for the issue of a recommendation to the competent authority for the issue of a Part-66 licence in accordance with 66.B.105 (limited to the case where the competent authority for the Part-145 approval and for the Part-66 licence is the same)~~
3.21 ~~3.22~~		Management system record-keeping
[…]		

ANNEX III (PART-66)

GM 66.1(a) Competent authority

CHANGE OF COMPETENT AUTHORITY

(a) The licence holder is expected to notify the competent authority that issued their current licence before applying to another authority for a new licence. Subsequently:

— For licences issued in physical format, the licence holder is expected to return their current licence to the issuing competent authority once it has been revoked. Following that, the competent authority to which the same person has applied may issue a new licence.

— For licences issued in electronic format, the licence holder and both competent authorities may convene on a date at which the licence issued by the previous authority is revoked and replaced by a new licence issued by the authority to which the person has applied.

(b) The competent authorities may arrange the transfer of records and the processing associated with the revocation and issuance of licences such that the period during which the applicant does not hold a licence is as short as possible.

(c) The change of competent authority is typically subject to exchanges of information between the authorities involved regarding the licence for which the change is being requested by the holder.

66.A.10 Application

(a) An application for the issuance of an aircraft maintenance licence ~~or change to such licence~~ shall be made to the competent authority referred to in point 66.1 by providing the information required by ~~on an EASA Form 19 (see~~ Appendix V to this Annex (Part-66) ~~in a manner established by the competent authority and submitted thereto~~.

(b) An application for the change ~~to~~ of an aircraft maintenance licence shall be made to the competent authority ~~of the Member State that issued the aircraft maintenance licence~~ referred to in point 66.1:

(1) by providing the information required by Appendix V to this Annex (Part-66), and

(2) for licences issued in physical format, by submitting the current licence to such competent authority.

(c) An application for the renewal of validity of an aircraft maintenance licence issued in physical format shall be made to the competent authority referred to in point 66.1:

(1) by providing the information required by Appendix V to this Annex (Part-66), and

(2) by submitting the current licence to such competent authority.

(d) An application for the issuance, change, or renewal of validity of an aircraft maintenance licence shall be made by either:

(1) the applicant, or

(2) the maintenance organisation approved in accordance with Annex II (Part-145) or Annex Vd (Part-CAO) that has a procedure in its exposition whereby it may submit the necessary documentation on behalf of the applicant.

~~(c) In addition to the documents required in points 66.A.10(a), 66.A.10(b) and 66.B.105, as appropriate, the applicant for additional basic categories or subcategories to an aircraft maintenance licence shall submit his/her current original aircraft maintenance licence to the competent authority together with the EASA Form 19.~~

~~(d) Where the applicant for change of the basic categories qualifies for such change via the procedure referred to in point 66.B.100 in a Member State other than the Member State which issued the license, the application shall be sent to the competent authority referred to in point 66.1.~~

~~(e) Where the applicant for change of the basic categories qualifies for such change via the procedure referred to in point 66.B.105 in a Member State other than the Member State which issued the license, the maintenance organisation approved in accordance with Annex II (Part-145) shall send the aircraft maintenance licence together with the EASA Form 19 to the competent authority referred to in point 66.1 for stamp and signature of the change or reissue of the licence, as appropriate.~~

~~(f) Each application shall be supported by documentation to demonstrate compliance with the applicable theoretical knowledge, practical training and experience requirements at the time of application.~~

66.A.40 Continued validity of the aircraft maintenance licence

(a) The validity of aircraft maintenance licences issued in physical format shall end ~~become invalid~~ 5 years after ~~its~~ their ~~last issue~~ issuance or last change. It shall be renewed for 5 years by the competent authority, provided that:~~, unless the holder submits his/her aircraft maintenance licence to the competent authority that issued it, in order to verify that~~

(1) an application for the validity renewal of the licence is submitted in accordance with point 66.A.10, and

(2) the competent authority finds that the information contained in the licence is the same as that contained in the ~~competent authority~~ records referred to in point 66.B.20~~, pursuant to point 66.B.120~~.

~~(b) The holder of an aircraft maintenance licence shall complete the relevant parts of EASA Form 19 (see Appendix V) and submit it with the holder's copy of the licence to the competent authority that issued the original aircraft maintenance licence, unless the holder works in a maintenance organisation approved in accordance with Annex II (Part-145) or Annex Vd (Part-CAO) that has a procedure in its exposition whereby such organisation may submit the necessary documentation on behalf of the aircraft maintenance licence holder.~~

~~(c)~~(b) Any certification privilege based upon an aircraft maintenance licence becomes invalid as soon as the aircraft maintenance licence is invalid.

~~(d)~~(c) The aircraft maintenance licence is only valid ~~(i)~~ when all the following conditions are met:

(1) it was issued ~~and/~~or changed by the competent authority~~, and (ii) when~~

(2) it includes the script signature of the holder ~~has signed the document~~,

(3) it has not been revoked, suspended, or surrendered.

GM1 66.A.40(a) Continued validity of the aircraft maintenance licence

VALIDITY OF AIRCRAFT MAINTENANCE LICENCES ISSUED IN ELECTRONIC FORMAT

The content of aircraft maintenance licences issued in electronic format is considered to be only modifiable through the licensing system and records of the competent authority referred to in point 66.B.20, such that the authority will always be either at the origin of or aware of any change to those licences.

Therefore, the validity of those licences can be ensured without the need for the holder to send their licence for review by the competent authority and does not need to expire every 5 years. Hence, point 66.A.40(a) does not apply in such a case.

AMC1 66.A.40(c) Continued validity of the aircraft maintenance licence

CONTENT VERIFICATION AND SIGNATURE OF THE AIRCRAFT MAINTENANCE LICENCE BY THE HOLDER

Before exercising any of the privileges granted with the issuance or change of their aircraft maintenance licence, the licence holder should:

— for all licences, ensure that its content matches the information provided with the application made in accordance with point 66.A.10;

— for licences issued in physical format, sign their licence under Section VII;

— for licences issued in electronic format, ensure that the script signature inserted under Section VII is correct.

The licence holder should report to the competent authority any content identified as incorrect for correction.

66.A.55 ~~Evidence of qualification~~Licence handling and reporting by the holder

(a) Upon request by an authorised person, ~~P~~personnel exercising certification privileges as well as support staff shall produce ~~their licence, as evidence of qualification, within 24 hours upon request by an authorised person~~ the following documents within 24 hours:

(1) their aircraft maintenance licence, as evidence of qualification;

(2) an identity document containing a photograph of the licence holder.

(b) The holder of the aircraft maintenance licence shall report to the competent authority that issued their licence the loss or theft of:

(1) their licence issued in physical format, or

(2) the device on which their licence was issued in electronic format.

(c) For aircraft maintenance licences issued in physical format, when the competent authority has revoked, suspended, or limited the licence pursuant to point 66.B.500, their holder shall return it to this authority.

(d) The holder of an aircraft maintenance licence issued in physical format shall keep it in a good condition and ensure that no unauthorised entries are made.

66.B.20 Record-keeping

(a) The competent authority shall establish a system of record-keeping that allows adequate traceability of the process to issue, ~~revalidate,~~ change, limit, suspend, or revoke each aircraft maintenance licence and renew the validity of those issued in physical format.

(b) These records shall include for each aircraft maintenance licence:

1. the application for the issuance, change, or renewal of an aircraft maintenance licence ~~or change to that licence~~, including all supporting documentation;

2. ~~a copy of the aircraft maintenance licence including any changes~~ the licensing data of the holder used to issue or change the licence;

[…]

[…]

GM1 66.B.20(b) Record-keeping

LICENSING DATA OF AIRCRAFT MAINTENANCE LICENCE HOLDERS

The licensing data of aircraft maintenance licence holders includes all the data used to issue or change a licence, including personal data, and inserted in:

— Sections III to XIII of EASA Form 26, referred to in point 2.1 of Appendix VI to Annex III (Part-66), including the licence validity date;

— Sections III to XIII and XVIa to XVIc of EASA Form 206, referred to in point 3.3 of Appendix VI to Annex III (Part-66).

66.B.25 ~~Mutual exchange~~ Sharing of information and licensing data

[…]

(c) When the competent authority issues aircraft maintenance licences in electronic format, it shall establish and implement a procedure to grant and revoke real-time read-only access to the licensing data of a licence holder, as defined in Appendix VI to this Annex (Part-66), as follows:

(1) such access shall be granted to a maintenance organisation approved in accordance with Annex II (Part-145) or Annex Vd (Part-CAO), as applicable; and

(2) such access shall be granted only for the licensing data of those licence holders of the organisation specified in point 66.B.25(c)(1), subject to the organisation having provided satisfactory evidence of its need to access such data.

AMC1 66.B.25(c) Sharing of information and data

SATISFACTORY EVIDENCE OF NEED PROVIDED BY THE MAINTENANCE ORGANISATION

The maintenance organisation approved in accordance with Annex II (Part-145) or Annex Vd (Part-CAO) should provide evidence that the licence holder is working for that organisation, through:

— a valid contract of employment, or

— a valid agreement or contract between the employer of the licence holder and the maintenance organisation, or

— any other document acceptable to the competent authority.

66.B.100 Procedure for the issue of an aircraft maintenance licence by the competent authority

(a) Upon receipt ~~On receipt of EASA Form 19 and any supporting documentation~~, the competent authority shall verify the completeness of the application for the issuance of an aircraft maintenance licence made in accordance with point 66.A.10 ~~EASA Form 19 for completeness~~ and ensure that the experience claimed meets the requirement of this Annex (Part-66).

[…]

(c) When having verified the identity ~~and date of birth~~ of the applicant and being satisfied that the applicant meets the standards of knowledge and experience required by this Annex (Part-66), the competent authority shall issue the relevant aircraft maintenance licence to the applicant in compliance with the applicable requirements of Appendix VI to this Annex (Part-66).

~~The same information shall be kept on competent authority records.~~

[…]

~~66.B.105 Procedure for the issue of an aircraft maintenance licence via a maintenance organisation approved in accordance with Annex II (Part-145) or Annex Vd (Part-CAO)~~

~~(a) A maintenance organisation approved in accordance with Annex II (Part-145) or Annex Vd (Part-CAO), when authorised to carry out this activity by the competent authority, may (i) prepare the aircraft maintenance licence on behalf of the competent authority or (ii) make recommendations to the competent authority regarding the application from an individual for a aircraft maintenance licence so that the competent authority may prepare and issue such licence.~~

~~(b) Maintenance organisations referred to in point (a) shall ensure compliance with points 66.B.100(a) and (b).~~

~~(c) In all cases, the aircraft maintenance licence can only be issued to the applicant by the competent authority.~~

~~AMC 66.B.105 Procedure for the issue of an aircraft maintenance licence via the Part-145 approved maintenance organisation~~

~~1. The maintenance organisation approved under Part-145 should include the procedure in the organisation's exposition (Chapter 3.21), and this procedure should be audited by the competent authority at least once in each 12-month period. This procedure should include a limitation stating that it is only applicable to the case where the competent authority for the Part-145 approval and for the Part-66 licence is the same.~~

~~2. The Part-145 organisation should check that the experience records have been properly countersigned.~~

~~3. The maintenance organisation approved under Part-145 may keep the experience record of applicants in a different form from that of application EASA Form 19 but such different form or manner should be acceptable to the competent authority.~~

66.B.110 Procedure for the change of an aircraft maintenance licence to include an additional basic category or subcategory

(a) For aircraft maintenance licences issued in:

(1) physical format, ~~A~~at the completion of the procedure~~s~~ specified in point~~s~~ 66.B.100 ~~or 66.B.105~~, the competent authority shall ~~endorse~~ include the additional basic category, subcategory or, for category B2L, system rating(s) ~~on the aircraft maintenance licence by stamp and signature or shall reissue the licence~~ in the licence by either:

(i) amending, signing, and stamping the current licence; or

(ii) producing, signing, and stamping a new licence including the changes and which shall replace the licence submitted by the holder with their application;

(2) electronic format, at the completion of the procedure specified in point 66.B.100, the competent authority shall update the licence to include the additional basic category, subcategory or, for category B2L, system rating(s).

[…]

AMC1 66.B.110 Procedure for the change of an aircraft maintenance licence to include an additional basic category or subcategory

REPLACING AIRCRAFT MAINTENANCE LICENCES AS PART OF THE CHANGE PROCESS

~~In the case of computer-generated licences, the licence should be reissued.~~

When the conditions set in the rule for extending a B2L licence to include the B2 category are met, the B2L licence should be replaced by or updated to a B2 licence.

~~The B2L licence replaced by a B2 licence should be retained by the competent authority.~~

66.B.115 Procedure for the change of an aircraft maintenance licence to include an aircraft rating or to remove limitations

(a) For aircraft maintenance licences issued in:

(1) physical format, ~~O~~on receipt of a satisfactory application in accordance with point 66.A.10 ~~EASA Form 19 and any supporting documentation demonstrating compliance with the requirements of the applicable rating together with the accompanying aircraft maintenance licence~~, the competent authority shall either endorse the licence with the applicable aircraft rating or remove the applicable limitations in accordance with point 66.A.50 by:

(i) ~~1. endorse the applicant's aircraft maintenance licence with the applicable aircraft rating~~ amending, signing, and stamping the current licence; or

(ii) ~~2. reissue the said licence to include the applicable aircraft rating~~ producing, signing, and stamping a new licence including the changes and which shall replace the licence submitted by the holder with their application.

~~3. remove the applicable limitations in accordance with point 66.A.50.~~

~~The competent authority record system shall be changed accordingly.~~

(2) electronic format, on receipt of a satisfactory application in accordance with point 66.A.10, the competent authority shall endorse the licence with the applicable aircraft rating or remove the applicable limitations in accordance with point 66.A.50 by updating the licence to include the changes.

[…]

66.B.120 Procedure for the validity renewal of an aircraft maintenance licence ~~validity~~ issued in physical format

(a) For aircraft maintenance licences issued in physical format, ~~T~~the competent authority shall compare the ~~holder's aircraft maintenance~~ licence with the ~~competent authority~~ records referred to in point 66.B.20 and verify any pending ~~revocation, suspension or change~~ action pursuant to point 66.B.500(a). If the information matches ~~documents are identical~~ and no action ~~is pending~~ pursuant to point 66.B.500 is pending, the ~~holder's copy~~ validity of the licence shall be renewed for 5 years ~~and the file endorsed accordingly~~ by either:

(1) amending, signing, and stamping the current licence; or

(2) producing, signing, and stamping a new licence including the new validity date and which shall replace the licence submitted by the holder with their application.

(b) Following comparison pursuant to point 66.B.120(a), ~~If the~~ when an aircraft maintenance licence is found to be different from the ~~competent authority~~ records referred to in point 66.B.20 ~~are different from the aircraft maintenance licence held by the licence holder~~, the competent authority shall:

(1) ~~. the competent authority shall~~ investigate the reasons for such differences and may choose not to renew the ~~aircraft maintenance~~ licence; ~~.~~

(2) ~~. the competent authority shall~~ inform the licence holder and any known maintenance organisation approved in accordance with Annex I (Part-M) Subpart F, Annex II (Part-145) or Annex Vd (Part-CAO) that may be directly affected by such fact; ~~.~~

(3). ~~the competent authority shall,~~ if necessary, take action in accordance with point 66.B.500(a) to revoke, suspend, limit, or change the licence in question.

AMC1 66.B.120 Procedure for the validity renewal of an aircraft maintenance licence ~~validity~~ issued in physical format

REPLACEMENT OF RENEWED AIRCRAFT MAINTENANCE LICENCES AND CONTINUED VALIDITY OF THE CERTIFICATION PRIVILEGES

(a) The competent authority should not carry out any investigation to ensure that the licence holder is in current maintenance practice as this is not a condition for the renewal of a licence issued in physical format. Ensuring the continued validity of the certification privileges is a matter for the approved Part-145 / M.A. Subpart F / Part-CAO maintenance organisation or the certifying staff in accordance with M.A.801(b)1.

(b) For the purpose of ensuring the continued validity of the certification privileges, the competent authority may, when periodically reviewing the organisations in accordance with 145.B.305, M.B.604 or CAO.B.055, or during on-the-spot checks, request the licence holder to provide documentary evidence of compliance with 66.A.20(b) when exercising certification privileges.

66.B.500 Revocation, suspension, or limitation of the aircraft maintenance licence

(a) The competent authority shall ~~suspend, limit or~~ revoke, suspend, or limit the aircraft maintenance licence where it has identified a safety issue or if it has clear evidence that the person has carried out or been involved in one or more of the following activities:

(1). obtaining the aircraft maintenance licence and/or the certification privileges by falsification of documentary evidence;

(2). failing to carry out requested maintenance combined with failure to report such fact to the organisation or person who requested the maintenance;

(3). failing to carry out required maintenance resulting from own inspection combined with failure to report such fact to the organisation or person for whom the maintenance was intended to be carried out;

(4). negligent maintenance;

(5). falsification of the maintenance record;

(6). issuing a certificate of release to service knowing that the maintenance specified on the certificate of release to service has not been carried out or without verifying that such maintenance has been carried out;

(7). carrying out maintenance or issuing a certificate of release to service when adversely affected by alcohol or drugs;

(8). issuing certificate of release to service while not in compliance with this Regulation~~.~~;

(9) making unauthorised entries in the aircraft maintenance licence.

(b) When the competent authority has issued valid aircraft maintenance licences in electronic format, it shall establish and implement a procedure for the revocation, suspension, or limitation of such licences.

(c) When the holder of an aircraft maintenance licence has reported the loss or theft of:

(1) their current licence issued in physical format, the competent authority shall revoke it and issue a new licence to the holder on the basis of the records mentioned in point 66.B.20; or

(2) the self-contained mobile electronic visual display device on which their licence was issued, the competent authority shall invalidate this licence and generate a new licence on another device declared by the holder and to which they have access.

GM1 66.B.500(a) Revocation, suspension, or limitation of the aircraft maintenance licence

AIRCRAFT MAINTENANCE LICENCES IN PHYSICAL FORMAT SUBJECT TO LIMITATION OR SUSPENSION

(a) When the competent authority has limited an aircraft maintenance licence issued in physical format, it may either:

(1) amend the current licence by clearly indicating the limitations and return it to the holder, or

(2) replace the current licence with a new one to include only the categories, sub-categories, or ratings that are not subject to limitations.

Subsequently, the competent authority can amend or replace the licence including the limitations on the date on which they end.

(b) When the competent authority has suspended an aircraft maintenance licence issued in physical format, it may either return the same licence to the holder or replace it with a new one on the date such suspension ends.

AMC1 66.B.500(b) Revocation, suspension, or limitation of the aircraft maintenance licence

PROCEDURE FOR THE REVOCATION, SUSPENSION, OR LIMITATION OF AIRCRAFT MAINTENANCE LICENCES ISSUED IN ELECTRONIC FORMAT

The procedure should describe the actions undertaken by the competent authority to ensure that the revocation, suspension, or limitation of a licence processed in its licensing system is properly reflected in the licence contained in the holder's personal device application.

Such actions should happen at the level of the electronic personnel licence system established by the competent authority to:

— In cases of limitation, notify the holder and request that they generate a new instance of the licence displaying only those categories, subcategories, or ratings not subject to limitation;

— In cases of suspension or revocation, notify the holder and request that they update their licence, thereby deleting the current instance of the licence contained in the application and preventing the generation of new instances.

In cases of limitation or suspension of the licence, the procedure should include the generation of a new instance of the licence on the date such limitation or suspension ends.

Alternatively, the competent authority may display a permanent indication regarding the applicable limitation, suspension, or revocation of the licence without which the licence cannot be displayed by the holder.

GM1 66.B.500(c) Revocation, suspension, or limitation of the aircraft maintenance licence

VOLUNTARY CHANGE OF DEVICE BY THE HOLDER OF AN AIRCRAFT MAINTENANCE LICENCE ISSUED IN ELECTRONIC FORMAT

Where a licence holder notifies the competent authority that they wish to change the device on which their licence can be accessed, and in the absence of a system enabling the holder to make this change autonomously, the authority may carry out the actions required by point 66.B.500(d)(2).

Appendix V — Application information ~~Form~~ — EASA Form 19

(a) Any application for the issuance, change, or renewal of the validity of an aircraft maintenance licence shall be made in a manner established by the competent authority and in accordance with the content of EASA Form 19.

(b) Each application shall be supported by documentation to demonstrate compliance with the applicable theoretical knowledge, practical training, and experience requirements at the time of application.

~~1. This Appendix contains an example of the form used for applying for the aircraft maintenance licence referred to in Annex III (Part-66).~~

~~2. The competent authority of the Member State may modify the EASA Form 19 only to include additional information necessary to support the case where the national requirements permit or require the aircraft maintenance licence issued in accordance with Annex III (Part-66) to be used outside the requirements of this Regulation.~~

APPLICATION FOR ~~INITIAL~~ISSUANCE/~~AMENDMENT~~CHANGE/VALIDITY RENEWAL OF A PART-66 AIRCRAFT MAINTENANCE LICENCE (AML)	**EASA FORM 19**

APPLICANT'S DETAILS:

Name: .....

Address: .....

Tel: ..... E-mail: .....

Nationality: ..... Date and Place of Birth: .....

PART-66 AML DETAILS (if applicable):

Licence No: ..... Date of Issue: .....

EMPLOYER'S DETAILS:

Name: .....

Address: .....

.....

Maintenance Organisation Approval Reference: .....

Tel: ..... Fax: .....

APPLICATION FOR: (Tick relevant boxes)

~~Initial~~ Issuance of a new AML ☐ ~~Amendment of~~ Change to an AML ☐ Validity ~~R~~renewal of an AML *(applies only to licences issued in physical format)* ☐

(Sub)categories	**A**	**B1**	**B2**	**B2L**	**B3**	**C**	**L (see below)**
Aeroplane Turbine	☐	☐					
Aeroplane Piston	☐	☐					
Helicopter Turbine	☐	☐					
Helicopter Piston	☐	☐					
Avionics			☐	☐ See system ratings below			
Piston engine non-pressurised aeroplanes of MTOM of 2t and below					☐		
Complex motor-powered aircraft						☐	
Aircraft other than complex motor-powered aircraft						☐	

System ratings for B2L licence:

1. autoflight ☐
2. instruments ☐
3. com/nav ☐

4. surveillance ☐
5. airframe systems ☐

L-licence subcategories: ☐

L1C: Composite sailplanes ☐
L1: Sailplanes ☐
L2C: Composite powered sailplanes and composite ELA1 aeroplanes ☐
L2: Powered sailplanes and ELA1 aeroplanes ☐
L3H: Hot-air balloons ☐
L3G: Gas balloons ☐
L4H: Gas balloons ☐
L4H: Hot-air airships ☐
L4G: ELA2 gas airships ☐
L5: Gas airship other than ELA2 ☐

Type endorsements/Rating endorsement/Limitation removal (if applicable):

……

I wish to apply for ~~initial~~ the issuance of /~~amendment of~~ a change to / the validity renewal of a Part-66 AML, as indicated, and confirm that the information and supporting documentation provided ~~contained in this form was~~ are correct at the time of application.

I herewith confirm that:

1. I am not holding any Part-66 AML issued in another Member State;
2. I have not applied for any Part-66 AML in another Member State; and
3. I never had a Part-66 AML issued in another Member State which was revoked or suspended in any other Member State.

I also understand that any incorrect information could disqualify me from holding a Part-66 AML.

~~Signed~~Name:……~~Name~~Date:……

~~Date: ……~~

Signature of the applicant:	

I wish to claim the following credits (if applicable):

……

……

……

Experience credits for Part-147 training

……

……

……

Examination credits for equivalent exam certificates

……

……

……

Please enclose all relevant certificates

~~Recommendation (if applicable): It is hereby certified that the applicant has met the relevant Part-66 maintenance knowledge and experience requirements and it is recommended that the competent authority grants or endorses the Part-66 AML.~~

~~Signed: …… Name: ……~~

~~Position: …… Date: ……~~

EASA Form 19 Issue ~~5~~6

AMC1 Appendix V to Part-66 — Application information — EASA Form 19

MEANS TO SEND AN APPLICATION RELATED TO THE AIRCRAFT MAINTENANCE LICENCE

The competent authority should define, implement, and communicate about the means through which an applicant can apply for the issuance, change, or renewal of the validity of an aircraft maintenance licence, including applications:

— using documentation in physical format;

— using an online platform allowing the upload of supporting documentation;

— using other practical means deemed appropriate by the competent authority.

GM1 Appendix V to Part-66 — Application information — EASA Form 19

ADDITION OF REQUIRED INFORMATION BY THE COMPETENT AUTHORITY

The competent authority may complement the content of EASA Form 19 to include additional information when it requires the aircraft maintenance licence issued in accordance with this Annex (Part-66) to be used outside the scope of this Regulation.

Appendix VI — Aircraft ~~M~~maintenance ~~L~~licence ~~referred to in Annex III (Part-66)~~ — EASA Forms 26 and 206

1. General requirements for the aircraft maintenance licence

1.1. The competent authority shall issue each aircraft maintenance licence in only one of the following formats:

(a) the physical format, referred to in point 2 of this Appendix; or

(b) the electronic format, referred to in point 3 of this Appendix.

1.2. When the competent authority uses both formats to issue aircraft maintenance licences, it shall establish a procedure for changing from one format to the other.

~~3.~~1.3. ~~The document may be filled in either~~ The aircraft maintenance licence shall be issued at least in English ~~or~~, irrespective of whether the competent authority decides to use other languages. ~~In the latter case, a second copy in English shall be attached to the document for any licence holder who needs to use the licence outside that Member State to ensure understanding for the purpose of mutual recognition.~~

~~4.~~1.4. Each licence holder shall have a unique licence holder number, established on the basis of:

— the country code of the Member State of the competent authority issuing the licence, ~~a national identifier~~ and

— a serial number ~~an alpha-numeric designator~~.

~~6. The document shall be prepared by the competent authority. However, it may also be prepared by any maintenance organisation approved in accordance with Annex II (Part-145), where the competent authority agrees to this and the preparation takes place in accordance with a procedure laid down in the maintenance organisation exposition referred to in point 145.A.70 of Annex II (Part-145). In all cases, the competent authority shall issue the document.~~

~~7. The preparation of any change to an existing aircraft maintenance licence shall be carried out by the competent authority. However, it may also be prepared by any maintenance organisation approved in accordance with Annex II (Part-145), where the competent authority agrees to this and the preparation takes place in accordance with a procedure laid down in the maintenance organisation exposition referred to in point 145.A.70 of Annex II (Part-145). In all cases, the competent authority shall change the document.~~

~~9. The aircraft maintenance licence issued in accordance with Annex III (Part-66) shall be recognised in all Member States and it is not required to exchange the document when working in another Member State.~~

~~10.~~1.5. When the competent authority chooses to include national privileges covered by national law and outside the scope of Annex III (Part-66), these shall be included in Section XIV of the aircraft maintenance licence. ~~The Annex to EASA Form 26 is optional and may only be used to include national privileges, where such privileges are covered by national law outside the scope of Annex III (Part-66).~~

1.6. When the aircraft maintenance licence is not endorsed with ratings, Section XII of the aircraft maintenance licence shall state 'No ratings'.

~~13.~~1.7. The limitations referred to in point 66.A.50 and included in t~~T~~he aircraft maintenance licence shall be clearly ~~indicate that the limitations are~~ formulated as exclusions from the certification privileges. ~~If there are no limitations applicable, the LIMITATIONS page shall state 'No limitations'.~~

2. Requirements for the aircraft maintenance licence issued in physical format

~~1.~~2.1. The aircraft maintenance licence shall be issued in accordance with the content of EASA Form 26. ~~An example of the aircraft maintenance licence referred to in Annex III (Part-66) can be found on the following pages.~~

~~2.~~2.2. The aircraft maintenance licence shall be produced such ~~document shall be printed in the standardised form shown but may be reduced in size to allow it being generated by computer. When the size is reduced, care shall be taken to ensure~~ that sufficient space is available in those places where official seals or stamps are required. ~~Computer-generated documents need not have all the boxes incorporated when any such box remains blank, so long as the document can clearly be recognised as an aircraft maintenance licence issued in accordance with Annex III (Part-66).~~

~~5. The document may have the pages in a different order to the one of this and needs not have some or any divider lines as long as the information contained is positioned in such a manner that each page lay-out can clearly be identified with the format of the example of the aircraft maintenance licence contained herein.~~

~~8. The holder of the aircraft maintenance licence shall keep it in good condition and shall ensure that no unauthorised entries are made. Failure to comply with this rule may invalidate the license or lead to the holder not being permitted to hold any certification privilege. It may also result in prosecution under national law.~~

~~11. With regard to the aircraft type rating page of the aircraft maintenance licence, the competent authority may decide not to issue this page until the first aircraft type rating needs to be endorsed and may need to issue more than one aircraft type rating page depending on the number of type ratings to be listed.~~

~~12. Notwithstanding point 11, each page issued shall be in the format of this example and contain the specified information for that page.~~

~~14.~~2.3. ~~Where a pre-printer format is used for issuing the aircraft maintenance licence, any~~ When the aircraft maintenance licence is issued in accordance with the format of EASA Form 26, any box in Section IX of the licence that is associated with a category~~,~~ or subcategory ~~or type rating box~~ which ~~does~~ is not ~~contain a rating entry~~ included in the licence shall be marked to show ~~that the rating~~ that such category or subcategory is not held by the holder.

2.4. If there are no applicable limitations pursuant to point 66.A.50, Section XIII of the licence shall state ‘No limitations’.

I.
EUROPEAN UNION (*)
[STATE]
[AUTHORITY NAME & LOGO]

II.
Part-66
AIRCRAFT MAINTENANCE LICENCE

III.
Licence No. [MEMBER STATE CODE].66.[XXXX]

EASA FORM 26 Issue ~~6~~7

IVa. Full name of holder:

IVb. Date ~~and place~~ of birth:

~~V. Address of holder~~

VI. Nationality of holder:

VII. Signature of holder:

III. Licence No:

VIII. CONDITIONS:

The privileges of this licence holder are prescribed by Commission Regulation (EU) No 1321/2014 and, in particular, Annex III (Part-66) thereto.
This licence, when endorsed with an aircraft rating, meets the intent of ICAO Annex 1.

This licence shall contain the script signature of the licence ~~be signed by the~~ holder and be accompanied by an identity document containing a photograph of the ~~licence~~ holder.

The ~~Endorsement~~ inclusion of ~~any~~ categories on the page(s) entitled 'Part-66 CATEGORIES' only~~,~~ does not permit the holder to issue a certificate of release to service for an aircraft.

~~This licence, when endorsed with an aircraft rating, meets the intent of ICAO Annex 1.~~

~~The privileges of this licence holder are prescribed by Regulation (EU) No 1321/2014 and, in particular, Annex III (Part-66) thereto.~~

This licence remains valid until the date specified on the limitation page unless previously suspended or revoked.

The privileges of this licence may not be exercised unless in the preceding ~~two~~ 2 year period, the holder ~~had~~ has either had ~~six~~ 6 months of maintenance experience in accordance with the privileges granted by the licence, or met the provisions for the issue of the appropriate privileges.

III. Licence No:

IX. Part-66 CATEGORIES

VALIDITY	A	B1	B2	B2L	B3	L	C
Aeroplanes Turbine			n/a		n/a	n/a	n/a
Aeroplanes Piston			n/a		n/a	n/a	n/a
Helicopters Turbine			n/a		n/a	n/a	n/a
Helicopters Piston			n/a		n/a	n/a	n/a
Avionics	n/a	n/a			n/a	n/a	n/a
Complex motor-powered aircraft	n/a	n/a	n/a		n/a	n/a	
Aircraft other than complex motor-powered aircraft	n/a	n/a	n/a		n/a	n/a	
Sailplanes, powered sailplanes, ELA1 aeroplanes, balloons and airships	n/a	n/a	n/a		n/a		n/a
Piston engine non pressurised aeroplanes of 2 000 kg MTOM and below	n/a	n/a	n/a			n/a	n/a

X. Signature of issuing officer & date:

XI. Seal or stamp of issuing authority:

III. Licence No:

[...]

~~Annex to EASA FORM 26~~ XIV. INFORMATION ON NATIONAL PRIVILEGES outside the scope of Part-66, in accordance with [National Legislation] (~~V~~valid only in [Member State])	INTENTIONALLY LEFT BLANK
Official Stamp & Date	
III. Licence No:	

EASA Form 26 Issue ~~5~~7

(*) Delete for non-EU Member States.

3. Requirements for the aircraft maintenance licence issued in electronic format

3.1. The competent authority shall establish and implement procedures for the set-up and operation of an electronic personnel licence system.

3.2. The electronic personnel licence system shall ensure the interoperability, security, confidentiality, data protection, authentication, and accessibility of the aircraft maintenance licence issued in electronic format.

3.3. The aircraft maintenance licence shall be issued in accordance with the content and format requirements of EASA Form 206 and replicate the information contained in the records of the competent authority.

3.4. The aircraft maintenance licence shall include a feature identified with the acronym 'ICAO' that allows it to display its contents in English.

3.5. The aircraft maintenance licence shall contain suitable active security features to differentiate it from a static image.

3.6. With regard to aircraft maintenance licence categories, the competent authority shall specify, in Section XII of the licence, only those categories and subcategories included in the licence of the holder.

3.7. The authenticity, validity, and content of the aircraft maintenance licence shall be electronically verifiable:

(a) online when an internet connection is available, or

(b) offline when no internet connection is available, through a means that imposes no undue burden on the competent authorities verifying the licence.

3.8. The electronic signature contained in Section X of the aircraft maintenance licence shall comply with the requirements applicable to qualified electronic signatures, as determined by Regulation (EU) No 910/2014.

The competent authority issuing the licence shall insert information in EASA Form 206 as follows:

— The competent authority shall determine the information to be inserted in the place of content between brackets ('[]'). When optional and not applicable, it shall insert the words 'Not applicable'.

— The competent authority shall insert the content that is not between brackets, or, for Section XIII, the content between quotation marks ('') that applies.

— Sections IVa, V, and XIa shall be left blank.

— Completing Sections XIV, XVIa, XVIb, and XVIc is optional.

	Content requirements	Format requirements
I	European Union (*) [Name of Member State]	[Name of Member State] shall be inserted in bold
II	Part-66 AIRCRAFT MAINTENANCE LICENCE EASA Form 206	All content shall be inserted in bold
III	Licence No. [Member State code].66.[XXXX]	[Member State code] shall be the United Nations country code of the Member State of the competent authority issuing the licence [XXXX] shall be a serial number inserted using Arabic numerals
IVa		
IVb	Name of holder in full: [Name]	[Name] shall also be inserted in Latin script when the script of the national language is not Latin
IVc	Date of birth of holder: [Date]	[Date] shall be inserted using the dd-mm-yyyy format (day-month-year)
V		
VI	Nationality of holder: [Nationality]	
VII	Script signature of holder: [Signature]	[Signature] shall be inserted as an image of the script signature of the holder

VIII	[Name of Competent Authority] The privileges of this licence holder are prescribed by Commission Regulation (EU) No 1321/2014 and, in particular, Annex III (Part-66) thereto. This licence, when endorsed with an aircraft rating, meets the intent of ICAO Annex 1. This licence shall contain the script signature of the licence holder and be accompanied by an identity document containing a photograph of the holder. The inclusion of categories in Section XII under 'Part-66 CATEGORIES' does not permit the holder to issue a certificate of release to service for an aircraft.	
IX	This licence remains valid unless previously suspended or revoked. The privileges of this licence may not be exercised unless in the preceding 2-year period, the holder has either had 6 months of maintenance experience in accordance with the privileges granted by the licence, or met the provisions for the issue of the appropriate privileges.	
X	Electronic signature of officer issuing the licence: [Name] [Date] [Time]	[Name] shall also be inserted in Latin script when the script of the national language is not Latin [Date] shall be inserted using the dd-mm-yyyy format (day-month-year) [Time] shall be inserted using the hh:nn:ss and 24 hour format (hours:minutes:seconds)
XIa		
XIb	Date and time of last synchronisation with the server of the competent authority: [Date] [Time]	[Date] shall be inserted using the dd-mm-yyyy format (day-month-year) [Time] shall be inserted using the hh:nn:ss and 24 hour format (hours:minutes:seconds)
XIc	Machine-readable code to retrieve authentication data: [Machine-readable code]	

XII	PART-66 CATEGORIES [Categories included in the licence] PART-66 RATINGS [Ratings endorsed on the licence]	[Categories included in the licence] and [Ratings endorsed on the licence] shall be inserted in accordance with a documented taxonomy
XIII	PART-66 LIMITATIONS As applicable: — 'Limitations are listed in Section XII of the licence', or — 'No limitations'.	
XIV	INFORMATION ON NATIONAL PRIVILEGES outside the scope of Part-66, in accordance with [National Legislation] (valid only in [Name of Member State]) [Text]	
XVa	*Reserved*	
XVb	*Reserved*	
XVc	*Reserved*	
XVd	*Reserved*	
XVIa	Other information associated with the licence as determined by the competent authority: [Text]	
XVIb	Other information associated with the licence as determined by the competent authority: [Text]	
XVIc	Other information associated with the licence as determined by the competent authority: [Text]	

EASA Form 206 Issue 1

(*) Delete for non-EU Member States.

GM1 Point 1.1 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

ISSUANCE OF AIRCRAFT MAINTENANCE LICENCES IN PHYSICAL OR ELECTRONIC FORMAT

The competent authority may decide to issue aircraft maintenance licences in physical format or in electronic format either to:

— certain licence holders based on criteria or conditions it has defined, or

— certain groups of licence holders based on criteria or conditions it has defined, or

— all licence holders.

The same person cannot hold an aircraft maintenance licence issued both in physical format and in electronic format at the same time.

AMC1 Point 1.2 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

PROCEDURE FOR CHANGING FROM ONE LICENCE FORMAT TO ANOTHER

The procedure should describe the triggering events, time, and conditions associated with the format change for a licence already issued by the authority.

Changing the format of a licence means either:

— generating a licence in electronic format to replace a licence in physical format for the same holder, or

— producing a licence in physical format to replace a licence in electronic format for the same holder.

The events triggering the change of format of a licence may include the strategy adopted by the competent authority to issue licences in a specific format for one licence holder, a defined group of licence holders or all licence holders.

Those events may also include any practical aspect justifying the use of one format rather than the other. Such practical aspects could be related to the appropriate use of that licence by the licence holder or the ability of the competent authority to issue licences as intended.

The time at which the format of a licence is changed should be predefined. It may be a date chosen by the competent authority or be associated with any processing of the licence for other purposes, such as:

— the inclusion of a new category or subcategory in the licence,

— the endorsement of the licence with a new aircraft or system rating,

— the removal of a limitation in the licence,

— the validity renewal of the licence in physical format 5 years after it was issued.

The conditions under which the format of a licence is changed should include:

— the withdrawal of the current licence issued in physical format or the invalidation of the current licence in electronic format before the new licence is generated or produced, as applicable;

— The means through which the licence holder is notified of such change and can obtain the new licence.

AMC1 Point 1.3 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

LANGUAGES USED TO ISSUE AIRCRAFT MAINTENANCE LICENCES

When the competent authority produces aircraft maintenance licences using one or more languages other than English, including the official language of its Member State, it should include the English translation in the same licence.

Alternatively, when there is not enough space to include the required English translation, a copy of the licence in English should be attached to it.

AMC1 Point 2.1 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

ARRANGEMENT OF THE CONTENT OF AIRCRAFT MAINTENANCE LICENCES ISSUED IN PHYSICAL FORMAT

(a) The content of aircraft maintenance licences issued in physical format may be arranged in a different order from that of EASA Form 26.

(b) When the aircraft maintenance licence is produced using paper, the competent authority may need to issue as many pages relating to Section XII of the licence as necessary depending on the number of aircraft or system ratings to be listed.

(c) The aircraft maintenance licence does not need to contain any divider lines, as long as the information is positioned in such a manner that each page layout can clearly be identified as corresponding to the format of EASA Form 26.

AMC1 Point 3.1 and Point 3.2 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

ELECTRONIC PERSONNEL LICENCE SYSTEM

1. DEFINITIONS

The following definitions apply to this Acceptable Means of Compliance.

'Issuing authority' means a competent authority with competence to issue aircraft maintenance licences.

'Mdoc' means a document or application that resides on a self-contained mobile electronic visual display device or requires such a device as part of the process to gain access to the document or application.

'Verifying authority' means a competent authority with competence to verify the content, validity, and authenticity of aircraft maintenance licences.

2. ABBREVIATIONS

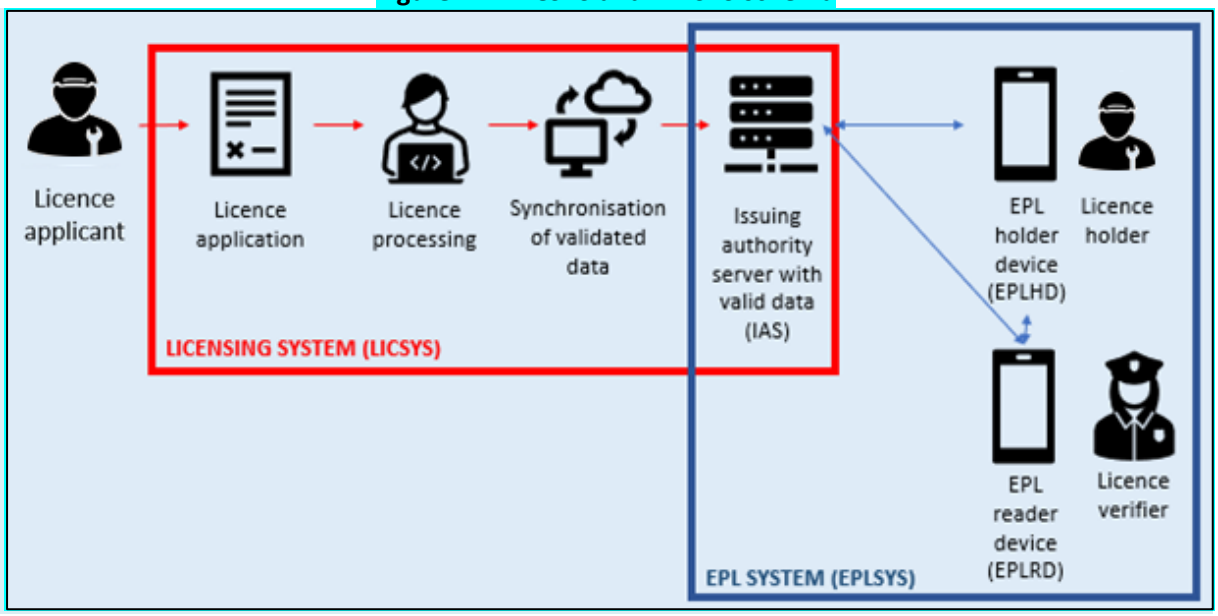
AML	aircraft maintenance licence
CSR	certificate signing request
EPL / EPLs	electronic personnel licence
EPLAPP	Application for a licence issued in electronic format
EPLDM	electronic personnel licence data model
EPLDS	EPL data set
EPLHD	electronic personnel licence holder's device
EPLRAP	EPL reading application
EPLRD	electronic personnel licence reading device
EPLSYS	electronic personnel licence system
HDPKIC	holder device public key infrastructure certificate
IAPKIC	issuing authority public key infrastructure certificate
IAS	issuing authority server
JWT	Java web token
LICSYS	licensing system
MSO	mobile security object
PKI	public key infrastructure
RDPKIC	reading device public key infrastructure certificate
TLS	transport layer security
URL	universal resource identifier

3. PRIOR TO IMPLEMENTATION

3.1. Licensing system and electronic personnel licence system

The licensing system (LICSYS) used by an issuing authority is not the electronic personnel licence system (EPLSYS). The LICSYS and the EPLSYS are independent systems that share the source where the information is stored: the issuing authority server (IAS) — see Figure 1.

Figure 1 — LICSYS and EPLSYS schema



(a) The LICSYS provides the tools that allow an issuing authority to manage the licence information in accordance with its procedures for issuing, updating, and invalidating the licence data. Only data that has been validated in the national LICSYS and stored as valid licence information can be used by the EPLSYS.

(b) The LICSYSs used by different issuing authorities might be different one from another: maybe some issuing authorities use an existing market solution, and others have developed their own LICSYS in accordance with their needs. Each LICSYS should work in accordance with the requirements of the regulatory framework that applies to the issuing authority (such as EU regulations, national regulations, and national procedures established for the issuance, renewal, revalidation, suspension, and revocation of a licence).

(c) The EPLSYS provides the means by which the licence data stored in a server of an issuing authority are converted to an Mdoc and are transferred to the holder device (EPLHD).

(d) The EPLSYS also provides the method by which external parties (inspectors or other parties, who will be generally called 'verifiers') can get the licence information on an electronic personnel licence reading device (EPLRD) and proceed with the verification the authenticity and validity of the of the licence issued in electronic format. Both the EPLHD and the EPLRD will need the installation of software that can process the licence information.

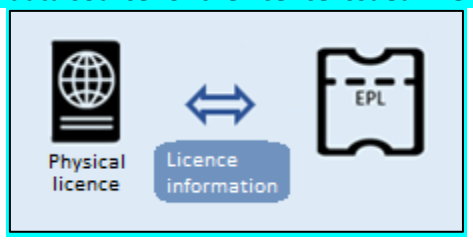
3.2. The data set for the licence issued in electronic format (EPLDS)

(a) Each type of licence issued in electronic format for aircrew, maintenance personnel or (student) air traffic controllers has a specific set of data defined in the Appendices to each applicable Regulation, such as Commission Regulation (EU) No 1178/2011 (aircrew); Commission Regulation (EU) 2015/340 (air traffic controllers' licences and certificates) or Commission Regulation (EU) No 1321/2014 (continuing airworthiness).

(b) In contrast to licences issued in physical format, licences issued in electronic format share a common structure, a common data set of information that is the same for all types of licences. This common structure has been included in the affected regulations, and in this AMC it will be referred to as the data set for the licence issued in electronic format (EPLDS).

(c) The EPLDS contains licence information consistent with that used for licences issued in physical format — see Figure 2.

Figure 2 — First data source for the licence issued in electronic format



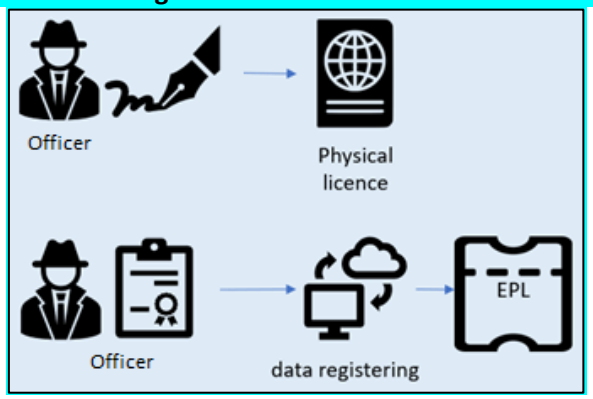
(d) Generally, the EPLDS is composed of one subset of data, similar to that used for the issuance and change of licences in physical format — see Table 1.

Table 1 — Information data set for each type of document

Document	Licence data set
Physical licence	Yes
EPL	Yes

(e) Licences issued in physical format allow the inclusion of additional basic categories and aircraft ratings as well as the removal or addition of limitations. Such changes are added to the current licence or implemented by producing a new licence and signed by the responsible officer of the issuing authority (who can be different from the one who signed the issuance of the licence). In the case of licences issued in electronic format, this can be considered as a second source of information — see Figure 3.

Figure 3 — Changes to a licence as a second data source



3.3. The term ‘licence’ and life cycles

A licence issued in electronic format contains a representation of the licence information at a particular moment in time. It will remain valid as long as the licence information remains the same, but the moment one of these subsets of data varies, this representation is no longer valid, and a new version of the licence issued in electronic format supersedes the current one.

Therefore, the invalidation of a licence issued in electronic format may not mean the suspension or revocation of the licence; it only means that the information in that representation is no longer accurate.

3.3.1. Issuance of a licence

Referring to licences (any format), the issuance could be considered as the process by which the document data of is validated by the issuing authority and the outcome is a valid licence being delivered to the licence holder. This process contains two important actions:

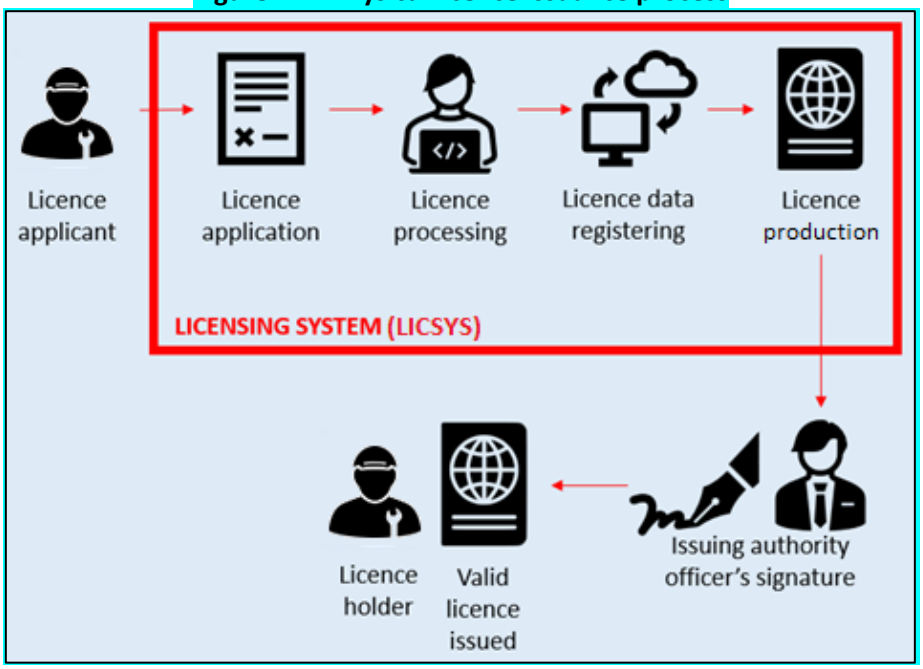
(a) production or generation of the licence: action by which the licence data is inserted into a document (independently of the format of the document);

(b) validation of data: action by which the licence data at a specific moment in time is rendered valid by a signature that comes from the issuing authority.

3.3.1.1. Physical licence issuance process

The process for issuing licences in physical format could be represented as in Figure 4:

Figure 4 — Physical licence issuance process



(a) A licence applicant (or holder if a licence has already been issued), fills out a licence application and submits it to the issuing authority in accordance with point 66.A.10.

(b) The issuing authority officers process the application following the established procedures.

(c) The licence information is registered in the LICSYS and the licence is produced.

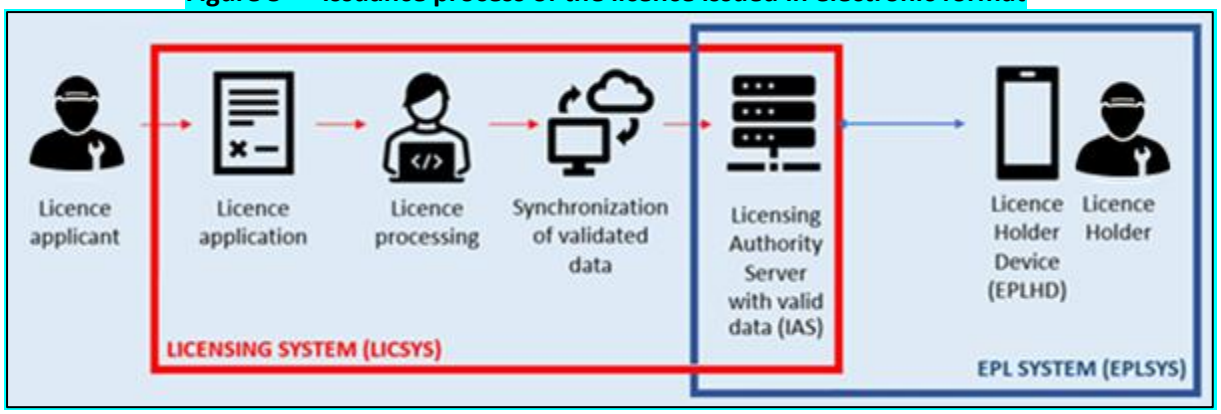
(d) The licence information is validated by an issuing authority officer's signature.

(e) The licence is provided to the applicant.

3.3.1.2. Issuance process of the licence issued in electronic format

The process for issuing licences in electronic format could be represented as in Figure 5:

Figure 5 — Issuance process of the licence issued in electronic format



(a) A licence applicant (or holder if a licence has already been issued) completes a licence application and submits it to the issuing authority in accordance with point 66.A.10.

(b) The issuing authority officers process the application following the established procedures.

(c) The licence data set information is registered in the EPLSYS. In order to be validated, it has to be signed digitally by an officer of the issuing authority.

(d) The licence holder needs to install the application for the licence issued in electronic format (EPLAPP) on the EPLHD and send a request for the generation of a licence issued in electronic format to this specific device.

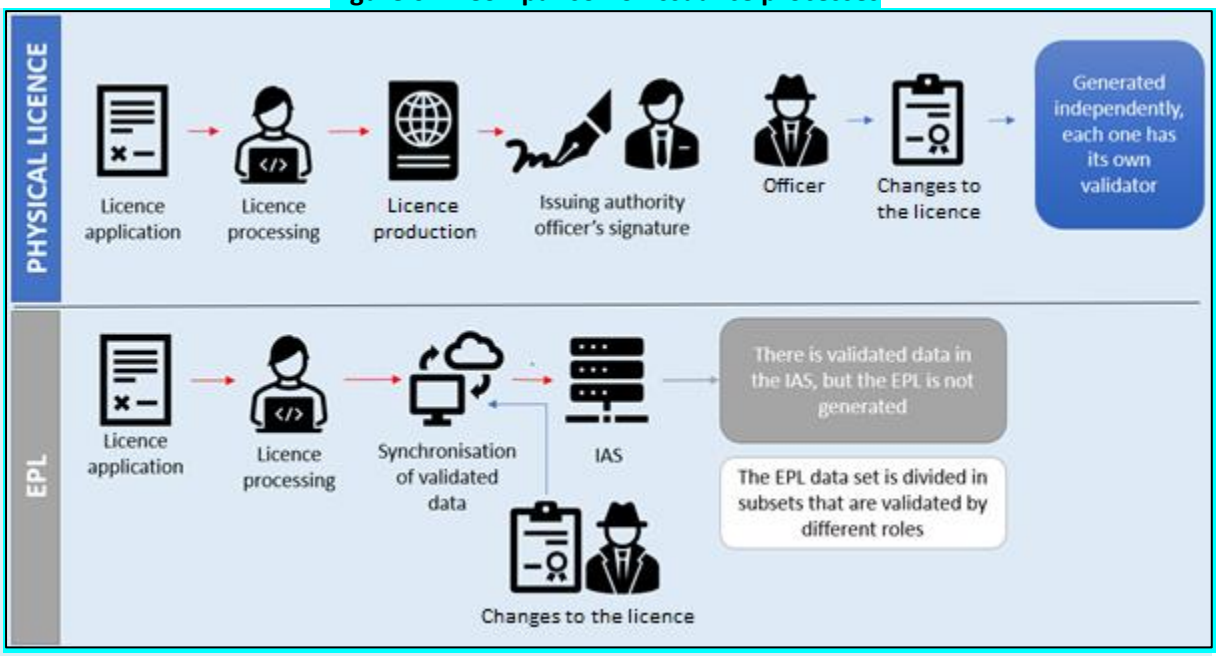
(e) The licence issued in electronic format is generated by the IAS and sent to the EPLHD.

(f) Once the licence issued in electronic format is received in the EPLHD, it is stored in the EPLAPP.

3.3.1.3. Comparison of issuance processes

The processes for issuing licences in physical and electronic format are compared through Figure 6:

Figure 6 — Comparison of issuance processes



(a) Changes to licence information are considered part of the licence data set, although they might have a different validator (i.e. issuing authority officer).

(b) The information of a licence issued in electronic format can be updated in response to changes in the data set. Every time that there is a change, an updated licence issued in electronic format should be generated, so that the information it contains is valid and up to date. This entails that a licence issued in electronic format will be generated and delivered more frequently than in a licence issued in physical format.

(c) The licence issued in physical format is produced and then validated by the officer's signature whereas, with an EPLSYS, the information of a licence in electronic format should first be validated by an officer in the LICSYS (by an electronic signature) before the Mdoc is generated and finally electronically signed by the issuing authority. The signature of the Mdoc is intended to protect the Mdoc information, not to validate the data it contains.

(d) A licence issued in physical format is produced when the issuing authority decides to do so, whereas, with an EPLSYS, the information verified by the issuing authority is used to generate the licence in electronic format (first issue or update) once the licence holder sends a request from the EPLHD.

(e) The licence holder is in charge of generating the information on the licence issued in electronic format
The licence issued in electronic format is linked to a specific self-contained mobile electronic visual display device. When the licence in electronic format is generated, it contains information about the device where it will be contained; therefore, the licence holder should have provided the information about the device prior to the generation of the licence in electronic format, meaning that it is the licence holder who initiates the generation of the licence in electronic format.

3.3.2. Suspension and revocation of a licence

(a) When a licence in electronic format is generated, the issuing authority should also generate a public key infrastructure (PKI) certificate that represents the issuing authority and the issuing authority PKI certificate (IAPKIC) with which the licence issued in electronic format is signed. The EPLDS of each licence issued in electronic format will be signed with a unique IAPKIC that is specific for each licence issued in electronic format.
Further details of this process are provided in Section 4.2.

(b) A licence issued in electronic format should be considered a representation that reflects the licence data set information at a specific moment in time. If any of this information changes, then the licence issued in electronic format should be invalidated and an updated licence in electronic format generated. The invalidation of a licence issued in electronic format takes place by revoking the IAPKIC used to sign the EPLDS, but this revocation of the IAPKIC should not be confused with the administrative act of revocation of a licence, which removes the privileges of the licence holder. Therefore, in order to avoid confusion, the revocation of an IAPKIC will be referred to in this AMC as 'invalidation', and the outcome is that the licence in electronic format signed with this IAPKIC is invalidated.

(c) An actual revocation of the licence entails the invalidation of the licence issued in electronic format, with no further generations of the licence being possible.

(d) The electronic personnel licence data model (EPLDM) does not include the status of the licence, therefore does not indicate whether a licence issued in electronic format is valid, suspended, or revoked.

(e) If a licence is suspended by an administrative act, the existing IAPKIC used to sign the licence issued in electronic format should be revoked and a new licence in electronic format generated without information. In an EPLSYS as defined by ICAO, the difference between the revocation and the suspension would be noted because:

(1) In the case of revocation, no licence issued in electronic format exists and no new licence issued in electronic format can be generated.

(2) In the case of suspension, the licence in electronic format can be generated, but it is empty (no valid data is available), and new licences in electronic format can be generated. When the suspension ends, a further generation of the licence in electronic format would recover all the valid licence data.

3.4. Verification of the authenticity and validity of a licence issued in electronic format

(a) The verification of the authenticity and validity of a licence issued in electronic format consists in verifying that the IAPKIC is still valid. When a licence issued in electronic format is invalidated, so is the IAPKIC, and the IAPKIC is added to a certificate revocation list in the IAS. This means that each licence issued in electronic format has a unique IAPKIC that is specific for each licence issued in electronic format, and its validity is checked, verifying whether the IAPKIC is still valid.

(b) The verification of the authenticity and validity of a licence issued in electronic format ensures that the information in the EPLDS has not been tampered with and it remains as provided by

the issuing authority. Verifiers will still need to look at the information provided and assess whether the holder has the appropriate privileges to perform whatever task the holder is performing, as done with a licence issued in physical format.

(c) The verification of the authenticity and validity of a licence issued in electronic format only verifies that:

(1) the licence issued in electronic format is still valid (the IAPKIC with which it was signed is not revoked); and

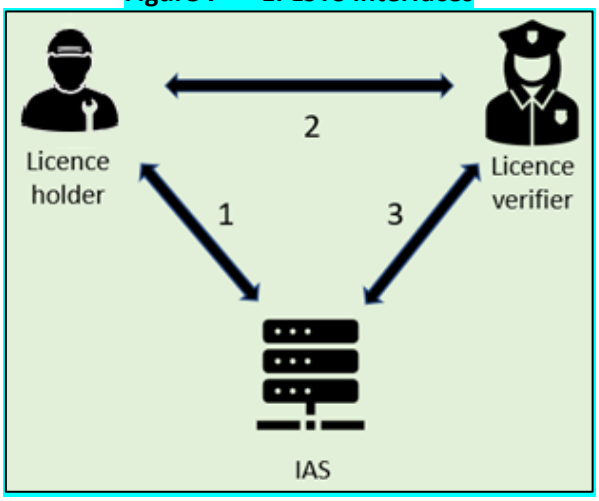
(2) the licence information of the licence issued in electronic format is as provided by the issuing authority.

4. EPLSYS

4.1. EPLSYS introduction

(a) An EPLSYS is an integrated system comprised of computer hardware, network and communication facilities, computer software, validated data, users, and rules to enable the issuance of licences in electronic format and the conduct of oversight activities.

Figure 7 — EPLSYS interfaces



Error! Reference source not found. represents the three interfaces of the EPLSYS, accordance to ISO 18013-5, which are:

(1) interface between the issuing authority and the licence holder;

(2) interface between the licence holder and the licence verifier;

(3) interface between the licence verifier and the issuing authority.

ISO 18013-5 applies to interfaces 2 and 3 and considers interface 1 (the link between the issuing authority's server and the licence holder) specific to each state.

(b) EPLSYS implementation requires that the issuing authority should develop an application for the licence holder: the EPLAPP. This application should be installed in the EPLHD and should allow the licence holder to connect with the IAS, receive and store the licence issued in electronic format (interface 1) and allow the verification of the validity and authenticity of the licence by a licence verifier that may use an EPLRD. This verification is done through interface 2 (offline through a data exchange between devices) or interface 3 (online through a connection with the IAS).

(c) Competent authorities are entitled to decide the level they want to implement when verifying licences issued in electronic format. This means that it is up to the issuing authority to decide

whether or not it is necessary to provide the licence verifiers with a tool for the verification of the validity and authenticity of the licences issued in electronic format. This verification tool consists of a second application that can be installed in an EPLRD, which allows engagement with the EPLHD, can understand the information received from the EPLHD and permits verification, both offline (interface 2) and online (interface 3). This application will be called the reading application for licences issued in electronic format (EPLRAP).

(d) The implementation of an EPLSYS does not require the implementing issuing authority to develop the EPLRAP, but it does require the development of the verification tools necessary for other verifying authorities to verify the validity and authenticity of the licences issued in electronic format by the implementing issuing authority. This means that the licences in electronic format generated by the implementing issuing authority should be able to be verified by EPLRAPs of other verifying authorities both offline (interface 2) and online (interface 3). The implementing issuing authority may choose not to develop an EPLRAP, but it needs to provide just the same the possibility for other states to verify its licences issued in electronic format through device engagement and by connection to the IAS.

(e) If an issuing authority does not develop an EPLRAP, there can only be a visual inspection of licences issued in electronic format. Verification using the EPLRAP provides extra measures of security that make it very difficult to tamper with the licence information of a licence issued in electronic format.

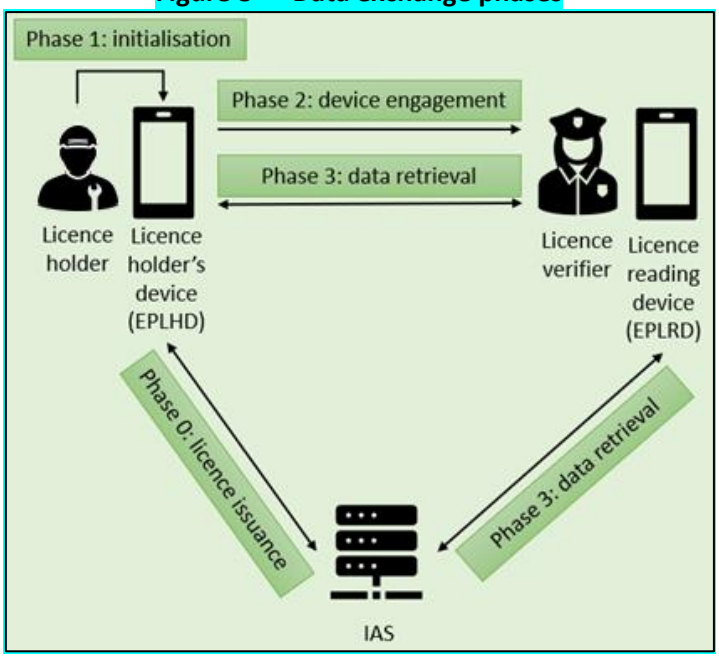
(f) It is important that verifying authorities be aware that they will have to verify licences in electronic format even if they do not implement them. Therefore, they might need an EPLRAP even though they do not issue licences in electronic format.

(g) The EPLHD and EPLRD where the EPLSYS applications will be installed should provide for the information security requirements.

4.2. Data exchange phases

There are the following phases of data exchange: licence issuance, initialisation, device engagement and data retrieval — see Figure 8.

Figure 8 — Data exchange phases



— **Phase 0 — Licence issuance:** This interaction is between the EPLHD and the IAS. In this phase a licence in electronic format is generated and stored in the EPLHD.

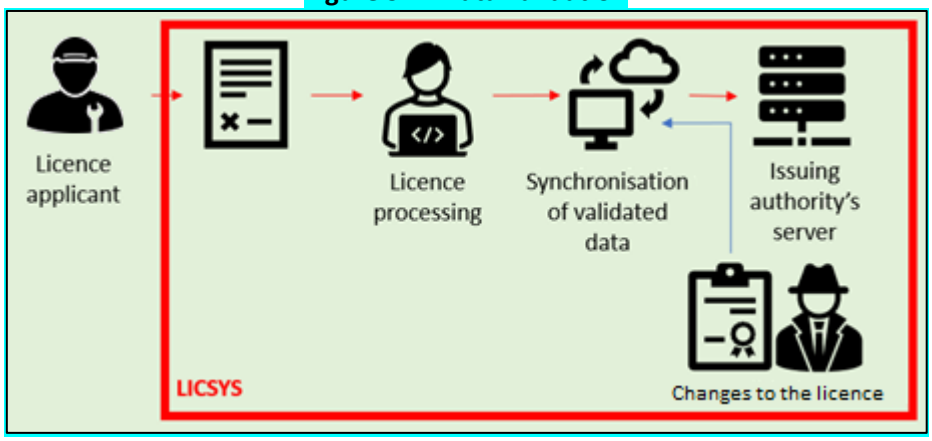
— **Phase 1 — Initialisation:** The licence holder initiates the EPLHD for licence verification. This phase is always initiated by the licence holder. A QR code that contains the information required to set up and secure phases 2 and 3 is generated. The EPLHD gets ready for phase 2.

— **Phase 2 — Device engagement:** The EPLRD reads the QR code generated in phase 1 on the EPLHD, and a message is transferred from the EPLHD to the EPLRD.

— **Phase 3 — Data retrieval:** The licence verifier selects the data retrieval mode and asks the licence holder for consent to access the licence data of the licence issued in electronic format. If consent is granted, this interaction depends on the methodology of the data retrieval: it can be either between the EPLHD and the EPLRD or between the EPLRD and the IAS. The licence information of the licence issued in electronic format is obtained in the EPLRD and verified.

4.2.1. Phase 0: Licence generation

Figure 9 — Data validation



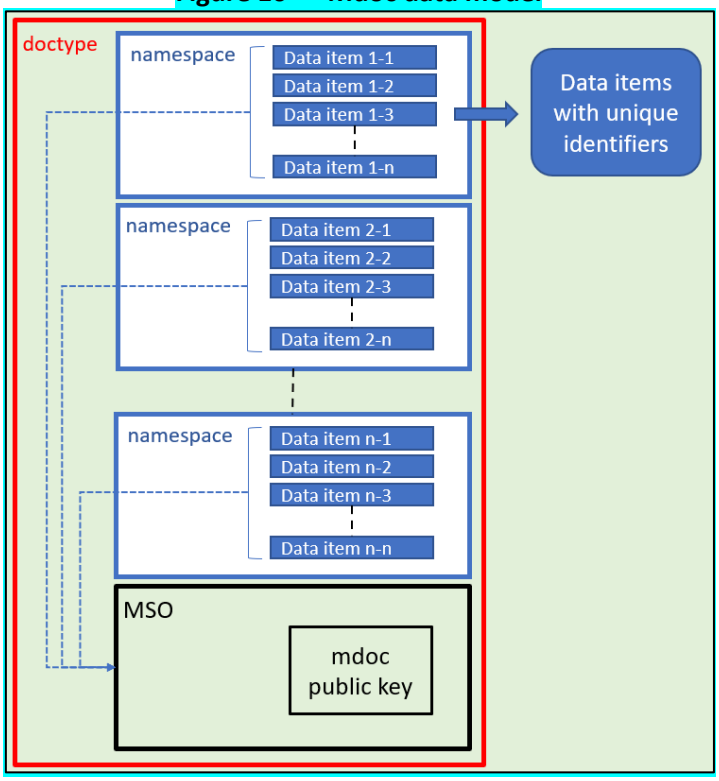
(a) Prior to the generation of the licence issued in electronic format, as explained in Section 0, the data has been validated in the LICSYS and properly stored in the IAS — see Figure 9. At this point, no generation of a licence in electronic format has occurred.

(b) The licence holder should have the EPLAPP installed on the EPLHD, and the EPLAPP should be initialised (see Section 0). The reader should note that the initialisation of the EPLAPP is not the same as the initialisation of 'phase 1: device engagement' when exchanging data.

4.2.1.1. The Mdoc of a licence issued in electronic format

(a) A licence issued in electronic format should follow the specification of an Mdoc — see Figure 10.

Figure 10 — Mdoc data model



(b) The doctype and namespace are used to encapsulate the document type and the space in which the data elements are defined.

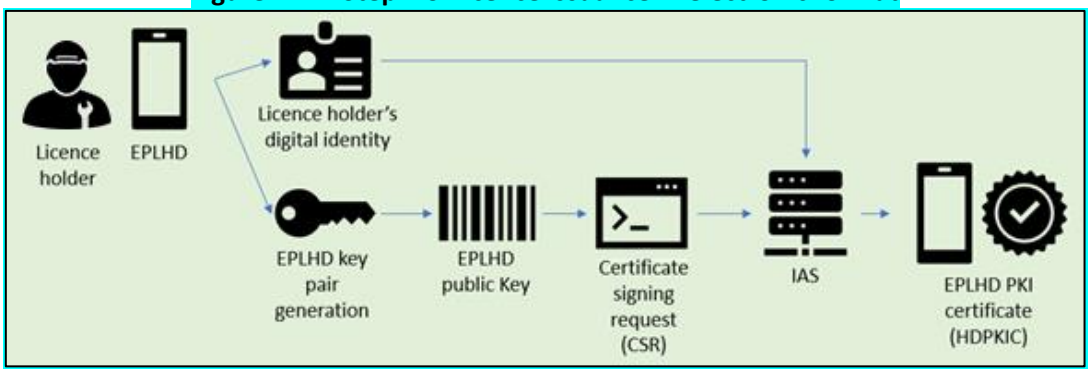
(c) The document type for licences issued in electronic format should be ‘int.icao.epl.1’; the number 1 represents the version of the document type. The licence issued in electronic format has a specific data model that might change with time; should this happen, the doctype version will change. The EPLAPP should be ready to work and be updated with new versions of the EPLDM.

(d) Each namespace of the licence issued in electronic format, as defined in ICAO Doc 10190, is related to one of the groups of information of the common form defined in ICAO Annex 1 (Appendix 4) and contains a list of data items in accordance with the licence data.

4.2.1.2. Step 1: Device enrolment with the issuing authority

To initiate the generation of a licence issued in electronic format, the EPLAPP should enrol the EPLHD with the issuing authority through an interface provided by the issuing authority. This enrolment is done creating a PKI certificate-signing request (CSR) in the EPLHD and sending it to the IAS, as shown in Figure 11:

Figure 11 — Step 1 of licence issuance in electronic format



(a) The EPLAPP generates a public/private key pair for the EPLHD, to be used only for this specific licence issued in electronic format.

(b) The public key generated in (a) is included in a CSR.

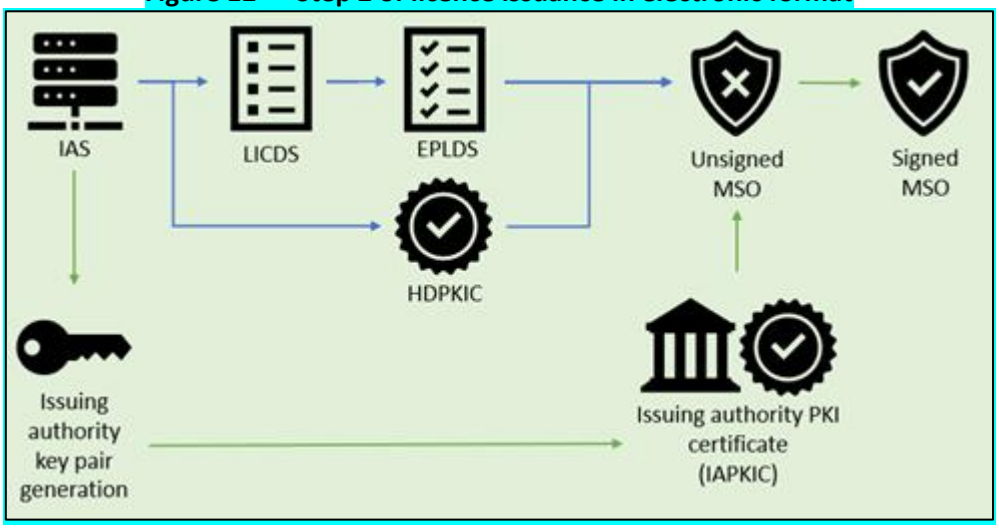
(c) The licence holder's digital identity and the CSR are sent to the IAS.

(d) The IAS issues and signs the holder device PKI certificate (HDPKIC). The HDPKIC represents the EPLHD identity and will allow the licence issued in electronic format to be linked to the EPLHD where the key pair was generated. This avoids the possibility that the licence issued in electronic format can be cloned in another EPLHD.

(e) The HDPKIC is stored with the licence holder's record in the IAS.

4.2.1.3. Step 2: Mobile security object generation

Figure 12 — Step 2 of licence issuance in electronic format



(a) The EPLSYS in the IAS should search for any already existing licence of the same type issued in electronic format for the holder (for example, a licence in electronic format was generated in another EPLHD) — see Figure 12. If so, the existing licence in electronic format should be invalidated before the new licence in electronic format is generated.

(b) The licence data set is obtained from where it is stored in the IAS. The information should be processed as it is organised in the valid data model, putting every piece of information in the corresponding namespace and data item. The EPLDS is obtained.

(c) The EPLDS and the HDPKIC are included in the mobile security object (MSO).

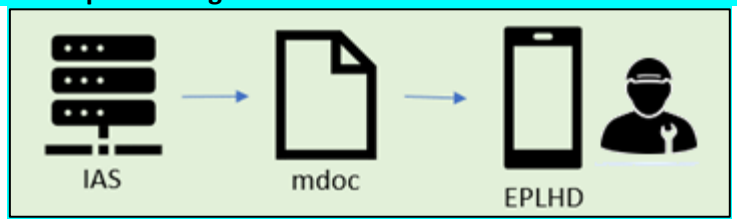
(d) ISO 18013-5 requires the use of two public/private key pairs in the Mdoc: one for the EPLHD (generated in step 1) and another one for the issuing authority. The authorities should generate a unique key pair for each individual licence issued in electronic format.

(e) The IAPKIC, which is a PKI certificate containing the issuing authority public key, is generated, and it is signed by the issuing authority.

(f) The MSO is signed with the private key of the IAPKIC.

4.2.1.4. Step 3: Delivery of the licence issued in electronic format

Figure 13 — Step 3 of the generation of the licence issued in electronic format



(a) The Mdoc is generated, including the IAPKIC, the information about the EPLDS and the MSO. The Mdoc is returned to the EPLHD — see Figure 13. The licence issued in electronic format is stored in the EPLAPP and ready to be displayed and verified.

(b) The EPLAPP may encrypt the Mdoc information using the HDPKIC, so the privacy of the licence holder is protected.

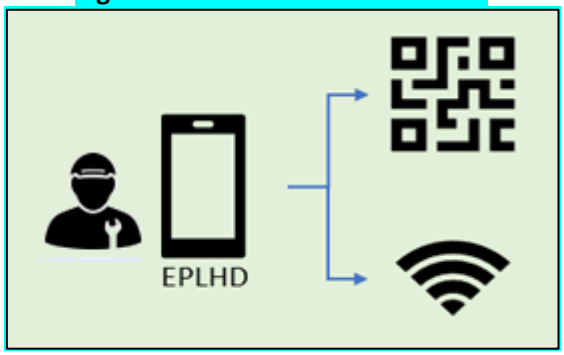
4.2.2. Phase 1: Initialisation

(a) The initialisation consists of preparing the EPLHD for the next phase (device engagement). The EPLSYS shall admit initialisation only using a QR code.

(b) The QR code contains the 'engagement message', which should follow the structure defined in Section 8.2.1.1 of ISO 180136-5 and contains information such as device retrieval technologies (offline retrieval); server retrieval technologies (online retrieval); server retrieval token; and protocol info.

(c) The licence holder will initiate the initialisation, actively requesting the EPLAPP to create the QR code. Once it is generated, the EPLHD should open the connections to allow the request from an EPLRD — see Figure 14.

Figure 14 — Phase 1: Initialisation



4.2.3. Phase 2: Device engagement

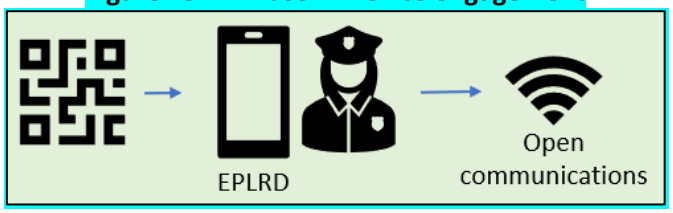
(a) The verification of the authenticity and validity of the licences issued in electronic format is done using wireless short-range peer-to-peer communication between the EPLHD and the EPLRD. The devices exchange information in two phases, the device engagement being the first

one of them — see Figure 15. This phase determines the technical characteristics for the later retrieval phase:

(1) The EPLRD, using the EPLRAP, reads the code generated in the EPLAPP.

(2) The EPLRD opens the communications to start the next phase.

Figure 15 — Phase 2: Device engagement



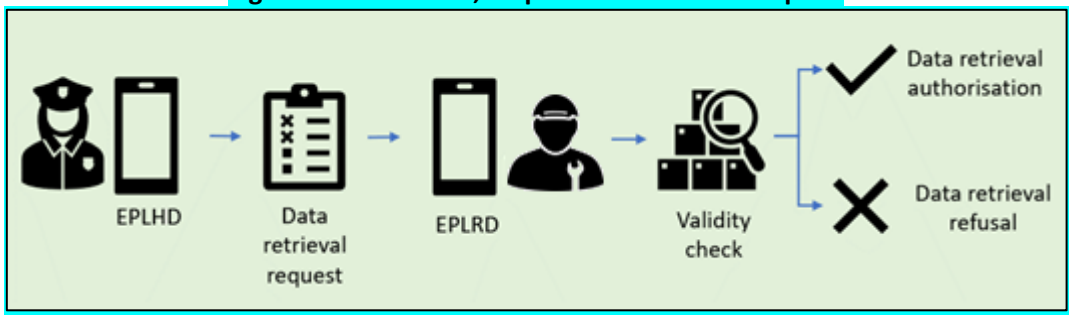
(b) During this phase, the engagement message is transferred from the EPLHD to the EPLRD by means of a QR code containing the information required to set up and secure the data retrieval. The information exchanged includes the capabilities of the EPLHD for the subsequent data retrieval (technologies usable: Bluetooth low energy, Wi-Fi aware (optional) and online) and parameters for a session initiation (cipher suites, keys). The message contains the security information used to initiate device retrieval and the token used to initiate server retrieval. Following transfer of the device engagement message, the information contained in the message is used to hand off the retrieval of the licence issued in electronic format to a separate channel (phase 3).

(c) The EPLRD may have an automatic timeout in case the engagement cannot be completed within a certain time (not less than 30 seconds is recommended). The EPLHD may terminate the engagement and the data retrieval at any time.

4.2.4. Phase 3: Data retrieval

4.2.4.1. Step 1: Data retrieval request

Figure 16 — Phase 3, step 1: Data retrieval request



(a) Once the devices are engaged, the verifier will generate in the EPLRAP a data retrieval request (see Figure 16), whereby the licence verifier notifies the holder of the licence which information from the EPLDS is to be retrieved and which retrieval method will be used.

(b) The data retrieval request is received by the EPLHD, and the EPLAPP will proceed to verify the validity of the data retrieval request.

(c) If the data retrieval request validation is successful, then the licence holder shall be able to authorise the data retrieval or refuse it.

(d) When the licence holder receives a data retrieval request from a verifier, the EPLAPP should carry out a few verification steps to assess whether the data retrieval request is valid, as follows:

(1) The EPLAPP gets the RDPKIC from the data retrieval request.

(2) The EPLAPP verifies that the RDPKIC is not expired and that it is signed with the verifier's IAPKIC.

(3) The EPLAPP verifies that the RDPKIC is not included in the PKI certificate revocation list of the verifier's authority (it would be so in case of a security key compromise, for instance).

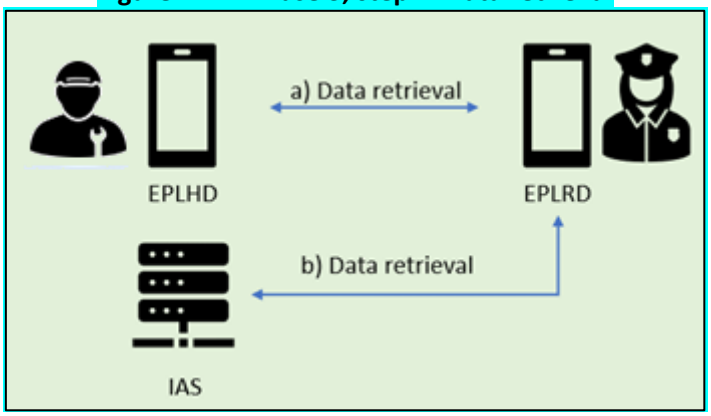
(4) The EPLAPP verifies that the verifier's IAPKIC is included in the trust list by following the steps described in Section 11.1.12 of ICAO Doc 10190.

(e) If any of these checks fail, an appropriate error indication is displayed in the EPLAPP, and the communication session should be terminated.

(f) If the validation of the data retrieval request is successful, the licence holder can proceed with the authorisation of data retrieval.

4.2.4.2. Step 2: Data retrieval

Figure 17 — Phase 3, step 2: Data retrieval



(a) The data retrieval methods available (see Figure 17) should be:

(1) device retrieval: the licence issued in electronic format is transferred from the EPLHD to the EPLRD (offline);

(2) server retrieval: the licence issued in electronic format is transferred from the IAS to the EPLRD (online).

(b) It is recommended that the first attempt at data retrieval be the device retrieval option and, if unsuccessful, only then is the server retrieval attempted.

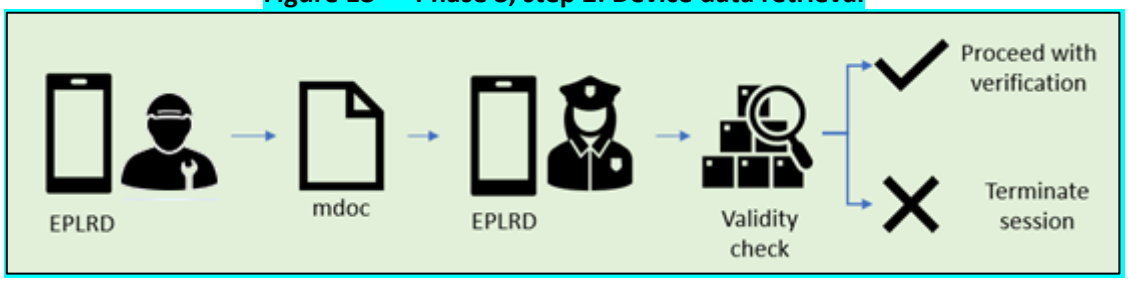
(c) The data retrieval works in a request/response type of communication. The EPLRAP sends a request for data elements and the EPLAPP (or IAS) responds with the requested data. The retrieval of data works in a session, and only those elements of the EPLDS that are requested by the verifier are transmitted once the licence holder has approved the request.

(d) Licences issued in electronic format may have additional data elements that can be defined by each issuing authority, and they might not be interoperable with reading devices from other states. If the EPLHD cannot recognise a requested data element, it will be ignored and the EPLRD might inform the licence verifier about the data elements that will not be returned.

(e) The data retrieval differs depending on the data retrieval option the licence verifier specifies in the data retrieval request.

4.2.4.2.1. Device data retrieval

Figure 18 — Phase 3, step 2: Device data retrieval



(a) Once the data retrieval request is authorised by the licence holder, the licence issued in electronic format is transferred from the EPLHD to the EPLRD — see Figure 18.

(b) When an EPLRD receives the licence issued in electronic format from an EPLHD, the EPLRAP verifies that:

(1) the IssuerSigned element contains the MSO;

(2) the MSO is signed by a non-expired IAPKIC and that the IAPKIC is included in the trust list following the steps of Section 11.1.1.2 of ICAO Doc 10190;

(3) the DeviceSigned element contains the HDPKIC;

(4) the HDPKIC is not included in the PKI certificate revocation list of the issuing authority.

(c) If any of those checks fail, an appropriate error indication is displayed by the EPLRAP and further information exchange should be terminated.

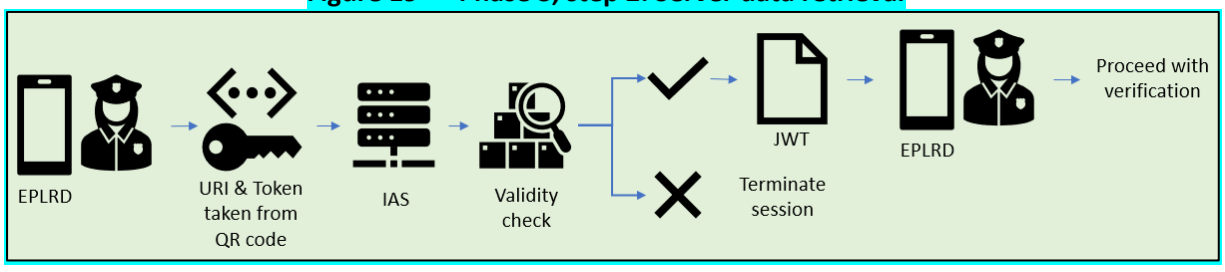
(d) The data elements of the licence issued in electronic format should be returned in the namespaces of the EPLDM defined in ICAO Doc 10190. The elements of the MSO should always be returned as IssuerSigned elements; if they were returned in the DeviceSigned data, the licence issued in electronic format should be considered invalid.

(e) The elements of the licence issued in electronic format should be verified to conform to the encoding format and maximum size as defined in ICAO Doc 10190.

(f) In order to ensure the integrity of the data value for each data element, the reader application should calculate the message digest for each data value using the digest algorithm specified in the MSO. The structure of the MSO is described in Section 9.1.2.4 'Signing method and structure for MSO' in ISO 18013-5.

4.2.4.2.2. Server retrieval

Figure 19 — Phase 3, step 2: Server data retrieval



(a) The licence information of the licence issued in electronic format is transferred from the IAS to the EPLRD.

(b) Section 6.3.2.5 of ISO 18013-5 contemplates two server retrieval options: web application programming interface (API) and OpenID Connect. ICAO Doc 10190 limits the options to web

API. Therefore, both the EPLHD and the EPLRD should support web API retrieval, the structure of which is defined in Section 8.2.1.2 of ISO 18013-5. It includes three fields:

(1) Version, currently 1;

(2) Issuer uniform resource locator (URL), as defined in Section 8.3.3.2.1 of ISO 18013-5;

(3) Server retrieval token.

(c) Secure retrieval of data of the licence issued in electronic format using server retrieval relies on a well-designed server retrieval token. The token and a universal resource identifier (URI) for accessing the issuing authority's EPLSYS are sent from the EPLHD to the EPLRD — see Figure 19. The EPLRD will use the token in response to the server retrieval request and does not need to verify or understand it, but the issuing authority receiving the request should perform validation of the authenticity and integrity of it. Each issuing authority will be able to determine the format of the server retrieval token; however, they should:

(1) be of a short duration;

(2) be used only once (single use);

(3) uniquely identify the licence holder;

(4) include consent for release of specific elements of the licence issued in electronic format;

(5) include digital device signature authenticating the licence holder.

(d) ISO 18013-5 supports transfer of the server retrieval token during both device engagement and data retrieval, but ICAO Doc 10190 specifies that the server retrieval token should be sent in the device engagement phase and not in the data retrieval phase.

(e) The EPLRD obtains the issuer URL contained in the device engagement message, to establish a connection with the issuing authority. The EPLRAP should verify the URL against the distinguished name field in the IAPKIC in the ICAO master trust list, to ensure that the URL is not spoofed. The communications between the EPLRD and the IAS should be secured using transport layer security (TLS) with mutual authentication.

(f) The issuing authority should validate the TLS PKI certificate presented by the EPLRD, and the EPLRD should validate the TLS PKI certificate presented by the issuing authority.

(g) The token provides authorisation from the licence holders for the licence verifiers to access licence data issued in electronic format. A valid token is required for server retrieval. If the validation of the token fails, the issuing authority should not return licence data issued in electronic format to the EPLRD.

(h) The issuing authority should verify that the fields that are requested by the reader have been approved for disclosure by the holder.

(i) The server response for Web API is described in Section 8.3.2.2.2.2 of ISO 18013-5, and it includes three fields:

(1) Version: always 1 as defined by ISO 18013-5;

(2) Documents: it will contain the licence issued in electronic format as a Java web token (JWT);

(3) DocumentErrors: The EPLRAP should process error codes contained here.

(j) The Java simple object notation (JSON) web signature should be protected using a Java simple object notation (JSON) web signature as specified in ISO 18013-5 Section 9.2.2. The EPLRD should validate the JWS as described in ISO 18013-5 Section 9.3.2.

4.3. Chain of trust

(a) Both the EPLAPP and EPLRAP should download the latest EPL master trust list from ICAO to the device where they have been installed and should check the electronic signature of the trust list to ensure its integrity.

(b) Each IAPKIC in the trust list will contain the URL distribution point value that points to the licence holder's and verifier's PKI certificate revocation lists for that state. These lists should be downloaded every 24 hours to the EPLHDs and EPLRDs to ensure that the revocation list is up to date and available for the verification process.

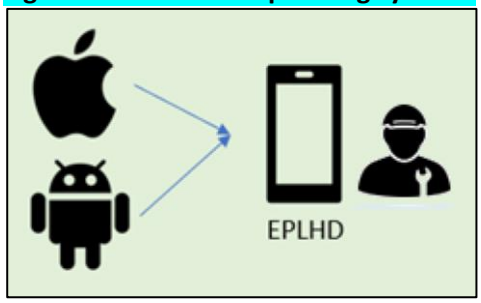
(c) In order to construct a valid chain of trust, the steps indicated in Section 11.1.1.2 of ICAO Doc 10190 should be followed.

4.4. EPLAPP

The EPLAPP will be installed in the EPLHD and will allow an appropriate way to identify the licence holder, generate and store one or several licences issued in electronic format, and synchronise the existing licences information issued in electronic format in the application. It will also have some functionalities that allow the licence holder to generate a one-time QR code that will allow engagement with an EPLRD and the retrieval of licence data of the licences issued in electronic format.

4.4.1. Downloading and installing the EPLAPP

Figure 20 — EPLAPP operating systems

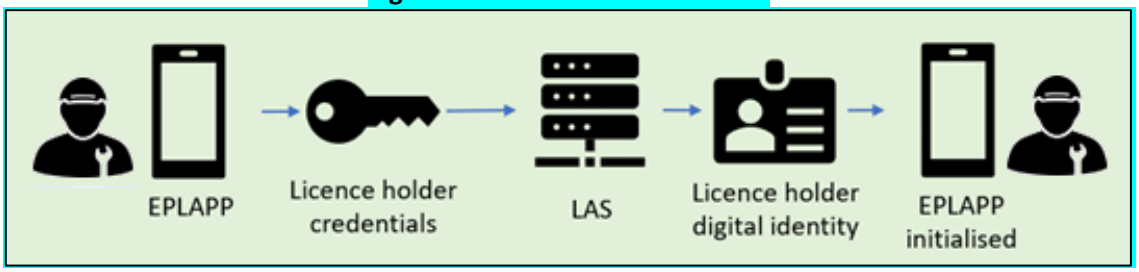


(a) Each issuing authority should publish its national EPLAPP for at least Android and iOS systems — see Figure 20.

(b) Once downloaded, the application should be installed like any market application for those operating systems.

4.4.2. Initialising the EPLAPP

Figure 21 — EPLAPP initialisation



(a) Any instance of an EPLAPP installed on a new device will need to follow an initialisation process — see Figure 21. The purpose of this process is to ensure the proper identification of the licence holder and to link the new EPLHD to the licence holder. The process of initialisation requires an internet connection to be available.

(b) The first time the licence holder signs in to an instance of an EPLAPP installed on a specific EPLHD, the licence holder needs to be properly identified. If the licence holder is in possession

of a digital certificate that already provides a digital identity, it can be used to log in to the EPLAPP.

(c) When the licence holder does not possess a digital identity, the licence holder should present themselves to the issuing authority, which, once the licence holder has been properly identified, will create the digital identity of the licence holder and provide credentials to log in to the EPLAPP.

(d) Issuing authorities could also consider the use of an approved vetting and proofing process that can create digital credentials for the licence holder. This process can be established using a method such as two-factor authentication using a username and password followed by a one-time token.

(e) All issuing authorities will need to prepare the EPLAPP to identify the licence holder using the EU Digital Identity Wallet of the holder and use it as the digital identity of the licence holder.

(f) Once the licence holder has logged in, the EPLAPP will verify the holder digital identity in the IAS and link the instance of the EPLAPP to the licence holder.

(g) The EPLAPP will send a confirmation that the initialisation process has successfully finalised. In the event of a failure, it will send a notification of any error that has occurred.

Once the initialisation process has successfully finalised, the EPLAPP will be available for use. Otherwise, the EPLAPP will have all its functionalities blocked and no information will be able to be seen or managed in the application.

4.4.3. Actions on the licence issued in electronic format

The EPLAPP should provide the licence holder with several actions to perform on the licence issued in electronic format, such as:

(a) Viewing the licence issued in electronic format**:** the licence issued in electronic format has been downloaded into a device and is ready to be used. Pressing the button leads the holder to view the licence issued in electronic format.

The information in the licence issued in electronic format is always available in English. However, Member States can use up to eight additional national languages.

(1) The EPLDM described in ICAO Doc 10190 allows the issuing authority to specify national privileges for the licence issued in electronic format. These national privileges might not follow a standardised taxonomy or might not be available in English. Therefore, it could happen that an EPLRD from another state is not able to read or process the information related to the national ratings.

(2) For these reasons, the EPLAPP needs to provide a standardised display of the licence issued in electronic format (that is, in English and lacking national privileges should they not be understood by EPLRDs from other states), which is considered the ICAO format and is compliant with ICAO specifications. Therefore, the EPLAPP provides for each type of licence the possibility of displaying the licence issued in electronic format in this ICAO format. The button in the EPLAPP that allows the generation of this format is required to display the ICAO logo.

(b) Generating a licence issued in electronic format**:** The Member State has made this type of licence available as a licence issued in electronic format, but the licence issued in electronic format has never been generated yet. Pressing this button will start the licence generation as described in phase 0 (see Section 0).

(c) Updating a licence issued in electronic format: The licence issued in electronic format has been downloaded to an EPLHD, but the EPLAPP detects that there have been changes in the EPLDS,

so the generation of a new licence in electronic format is required. The EPLAPP needs to indicate to the licence holder that a new licence issued in electronic format should be generated.

It is important that the licence holder manually initiates the generation of the updated licence in electronic format, since this action will also invalidate the former licence issued in electronic format. Therefore, the former licence in electronic format should be valid until the new licence in electronic format is generated.

(d) Transferring the licence issued in electronic format: The licence issued in electronic format has been downloaded to another device. The licence holder can decide to transfer the licence to this device, which will invalidate the licence issued in electronic format in the first device and generate a new licence in electronic format in the current device.

4.4.4. Availability of the licence issued in electronic format

(a) There might be cases where the licence holder will not be able to request the generation of the licence in electronic format in the EPLAPP. In these cases, an indication of 'EPL not available' should be shown to the licence holder.

(b) The message 'EPL not available' could be due to any of the following situations:

(1) The issuing authority has decided not to use the electronic format for this particular licence.

(2) The licence holder does not hold an aircraft maintenance licence.

(3) The licence holder holds an aircraft maintenance licence in physical format, therefore a licence in electronic format cannot be generated.

4.4.5. List of licences

Figure 22 — EPLAPP home page

(a) This section features a proposed design of the EPLAPP home page for competent authorities, although a different solution that better suits their purposes may be chosen.

(b) **Error! Reference source not found.**' proposes that the home page of EPLAPP contains the identification data of the licence holder and a list of all the licences held by the holder. Each licence issued in electronic format is an independent entity, which might have been issued subject to a different EU regulation, but it would be costly for the issuing authority to develop and maintain one independent EPLAPP for each type of licence. The list of licences in this example allows all the types of licences to be listed in a single application, and each type of licence has an associated action depending on the status of the licence.

(c) If the EPLAPP uses such a list, the issuing authority will only be required to develop and maintain a single EPLAPP.

(d) Every time the list is loaded, there will be a synchronisation of the licence information of each type of licence, so the synchronisation date of each type of licence should be updated.

(e) When developing the EPLAPP, it should be taken into consideration that the application needs to be able to function properly offline. If the EPLHD is online, the list of licences and available actions can be synchronised as appropriate. If the EPLHD is not online, only the licences issued in electronic format stored on this specific device will be listed.

4.4.6. Accessing a licence issued in electronic format

When a licence issued in electronic format is stored in an instance of the EPLAPP, the action 'View EPL' will be available. Pressing the button will lead to the licence information of the licence issued in electronic format and the actions that can be taken on that specific licence issued in electronic format, such as:

(a) Manual synchronization

This action will not be available in offline mode. When selected, the EPLAPP will look for any changes in the licence issued in electronic format and update the date of last synchronisation. If necessary, the licence information of the licence issued in electronic format will be updated by the generation of a new licence in electronic format.

(b) Deactivation of the licence issued in electronic format

This action will allow the holder of the licence issued in electronic format to deactivate it in the instance of the EPLAPP on which it is stored. Therefore, the licence issued in electronic format will be invalidated.

When the licence holder decides to erase the licence issued in electronic format from an instance of the EPLAPP, such deletion:

(1) should delete all information, including log information, and any metadata that could impart information about the erased licence in electronic format;

(2) should not require approval by the issuing authority;

(3) should be available to a licence holder via a request from the issuing authority.

Issuing authorities should consider making it possible to delete a licence in electronic format from an EPLHD remotely, for security reasons (such as the EPLHD being stolen).

(c) Generation of a QR code

When the licence is verified by a licence verifier, the licence holder should generate the QR code that will allow the device engagement with the EPLRD. This action will allow the generation of the QR code.

4.4.7. Licence active security features

As a security measure, licences issued in electronic format have security features such as a moving image that allow the verifiers to be certain they are not viewing a static image.

4.4.8. Audit log

The EPLAPP should be capable of maintaining an audit log. The licence holder should be able to decide whether to make use of this log or not. The audit log and related settings should be accessible only to the licence holder.

The audit log will keep a record of all the transactions concerning the licence issued in electronic format (sharing licence information of the licence holder with a verifier for the licence issued in electronic format) and communication actions between the EPLHD and the issuing authority.

4.5. EPLRAP

(a) The EPLRAP will be installed on the EPLRD and will allow the staff of competent authorities to retrieve data from a licence issued in electronic format (or directly from an IAS) and proceed with the necessary verification of the data, such as the validity of the signature and the validity of the EPLDM that has been retrieved.

(b) Member States that decide to develop an EPLRAP should follow the specifications of this AMC.

(c) The EPLRAP should only be installed on devices that belong to the verifying authority, and not on the personal devices of the verifying authority staff. The competent authorities should provide their staff with the tools required to fulfil their tasks.

4.5.1. EPLRAP functional requirements

The EPLRAP should include at least the following functional requirements:

(a) It needs to be able to request, receive and verify the integrity and authenticity of a licence issued in electronic format whether online connectivity is present or not for either the EPLHD or the EPLRD.

(b) A user of EPLRAP not associated with the issuing authority needs to be able to verify the integrity and authenticity of a licence issued in electronic format.

(c) The reader needs to be enabled to confirm the link between the person presenting the licence issued in electronic format and the licence holder.

(d) The interface between the licence issued in electronic format and the EPLRAP should support the selective release of the licence data issued in electronic format to the reader.

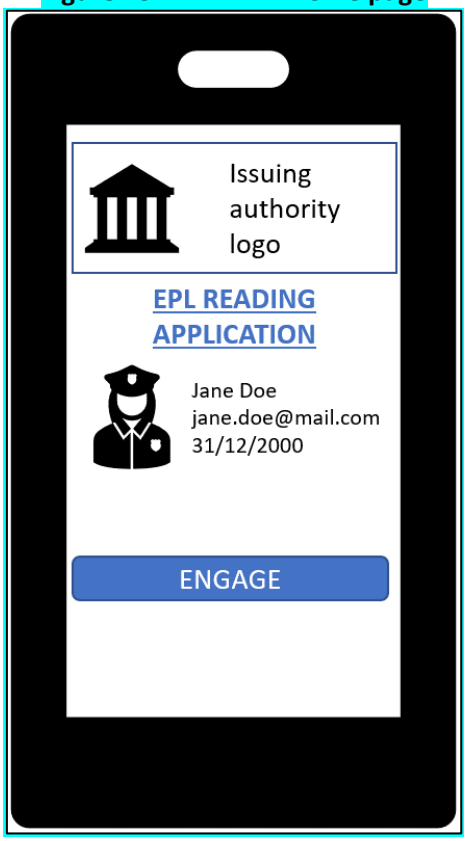
4.5.2. Downloading and installing EPLRAP

(a) Each verifying authority can decide to develop its own EPLRAP in any operating system that best suits the authority's purposes. Unlike the EPLAPP, the verification application will be developed to be used only by the verifying authority's staff. Therefore, it can be developed in accordance with the verifying authority's requirements.

(b) The application should not be publicly available. The verifying authority can install the EPLRAP on the devices of the staff who need to perform verification of the licence issued in electronic format.

4.5.3. Reading a licence issued in electronic format with EPLRAP

Figure 23 — EPLRAP home page



(a) The home page of the EPLRAP will have the user's basic information — see Figure 23. It does not need to have personal data; the officer/inspector number or any other type of identification the authority considers necessary should be enough.

(b) Under the person's details, there should be an 'Engage' button that will activate the EPLRD camera to read the QR code generated in the EPLAPP. Once the code is read, the EPLRAP will manage the information from the QR code and proceed with the device engagement (see Section 0).

(c) With the devices engaged, the licence verifier should send a request to the EPLHD, specifying the data to be retrieved from the licence issued in electronic format. By default, the EPLRAP will have the following requests available:

(1) Full licence data retrieval: this request should contain all the licence information of the licence issued in electronic format.

(2) Customised data retrieval: this option should allow the licence verifier to choose which items of the licence issued in electronic format to request to be retrieved from the licence issued in electronic format.

(d) Once the set of data to be requested has been selected, the licence verifier needs to indicate the data retrieval mode (device retrieval or server retrieval).

(e) With the selections defined, the EPLRAP will generate the data retrieval request and send it to the EPLHD. Only if the licence holder authorises the data retrieval will the licence information of the licence issued in electronic format be retrievable.

(f) The EPLRAP should display the licence information of the licence issued in electronic format in accordance with the data dissemination option authorised by the licence holder.

4.5.4. Data retention

(a) The information should be kept only during the time necessary for the inspection and accident/incident processes and be removed within 24 hours from the end of the verification process. Appendix D to ICAO Doc 10190 specifies the policy on data retention in EPLRDs.

(b) If a verifying authority requires to keep data from the licence issued in electronic format, the licence holder, who will be properly informed, should be notified and agree in writing.

5. DATA MODEL

5.1. EPLDS

(a) All types of licences issued in electronic format should be compliant with the common EPLDS that has been defined in the applicable Regulation. Table 2 lists how the aircraft maintenance licence data of the licence issued in electronic format is structured, and has the following structure:

— Section: Defines a portion of a licence that contains specific data units that have a logical relation with each other

— Data unit**:** Piece of licensing data of the licence issued in electronic format that defines specific information.

(b) However, not all the data units of the EPLDS are included in the MSO signed by the IAPKIC. In the column 'MSO', those data units to be included in the MSO are specified. In addition, the column 'Presence' determines which data units are mandatory (M), optional (O), and mandatory as long as they are applicable (M*).

Table 2 — EPLDS

Section	Data unit	Data unit description	MSO	Presence
General	I	Name of Member State	Yes	M
	II	Title of licence	Yes	M
	III	Licence number	Yes	M
Personnel information	IVa		Yes	M
	IVb	Name of holder in full	Yes	M
	IVc	Date of birth	Yes	M
	V		Yes	M
	VI	Nationality of holder	Yes	M
	VII	Script signature of holder	No	M
Issuing authority	VIII	Authority and conditions under which the licence is issued	Yes	M
	IX	Certification concerning validity and authorisation for holder to exercise privileges appropriate to the licence	Yes	M
	X	Electronic signature of officer issuing the licence and the date and time of issue	No	
	XIa		No	M
	XIb	Date and time of last synchronisation with the server of the competent authority	No	
	XIc	Machine-readable code to retrieve authentication data	No	

Rating	XII	Part-66 categories and ratings	Yes	M
Remarks	XIII	Part-66 limitations	Yes	M*
	XIV	Information on National Privileges outside the scope of Part-66, in accordance with national legislation	Yes	M*
Medical assessment	XVa	*Reserved*	Yes	
	XVb	*Reserved*	Yes	
	XVc	*Reserved*	Yes	
	XVd	*Reserved*	Yes	
Additional supplementary information	XVIa	Other information associated with the licence	Yes	M*
	XVIb	Other information associated with the licence	Yes	M*
	XVIc	Other information associated with the licence	Yes	M*

5.2. EPLDM

(a) The data model should be followed in order to guarantee the interoperability of licences issued in electronic format around the world.

(b) The licence issued in electronic format consists of an Mdoc that is divided into several namespaces, each one related to one of the sections of the EPLDS and composed of several items that provide the licence information.

(c) The doctype for a licence issued in electronic format is int.icao.epl.X, where 'X' reflects the version of the licence issued in electronic format. It is expected that the licence issued in electronic format will be subject to changes due to amendments and new requirements that may apply in the future. In the first version of the doctype, X = 1, and it will be increased with future versions. Each namespace is directly related to a section of the EPLDS.

(d) Table 3 provides the namespaces.

Table 3 — Namespaces of the licence issued in electronic format

Namespace	EPLDS section	Data units
int.icao.epl.general.1	General	Name of Member State, title of licence, licence number
int.icao.epl.personnel.1	Personnel information	Name of holder, date of birth, nationality of holder, script signature of holder
int.icao.epl.authority.1	Issuing authority	Name of authority, conditions under which the licence is issued, certification concerning validity and authorisation for holder to exercise privileges, signature of the officer issuing the licence, seal of the authority, date and time of last synchronisation, machine-readable code to retrieve authentication data
int.icao.epl.ratings.1	Ratings	List of ratings of the licence (includes Part-66 ratings and categories)

int.icao.epl.remarks.1	Remarks	List of remarks (includes Part-66 limitations and national privileges outside the scope of Part-66)
int.icao.epl.medical.1	Medical assessment	*Not applicable*
int.icao.epl.additional.1	Additional supplementary information	Any other relevant licence information related to the licence

(e) The following sections of this AMC define how the information in each data unit should be formalised in the EPLDM. A single data unit may be composed of one or more items; for example, some data units have one item with the information in English and another item with the information in national languages other than English, so the EPLDM can provide the means to use up to eight languages in addition to English. All the information from the EPLDM in English conforms to what is called the ICAO version, which is the one expected to be used by authorities other than the issuing authority.

(f) Each item will be determined by the following components:

(1) Its own identifier, which makes it possible to uniquely identify the item and allows a verifier to select which items will be included in either the device retrieval request or the server retrieval request as specified in Section 0.

(2) An encoding format that defines how the item is encoded. The concise data definition language as defined in RFC 8610 is used where possible, and ISO 180136-5 Section 7.2.1 provides encoding formats for data retrieval for concise binary object representation and Java simple object notation.

(3) A maximum size, which limits the size an item can have.

These components are specified in the following sections of this AMC.

5.2.1. Namespace int.easa.epl.general.1

The namespace int.icao.epl.general.1 includes elements I, II and III of the EPLDS. This namespace has been adapted into int.easa.epl.general.1 so that it allows the introduction of several titles in a licence issued in electronic format, in contrast to int.icao.epl.general.1, which permits the incorporation of only one title.

5.2.1.1. Data unit I — name of the Member State

The 'name of state' data unit provides the name of the issuing state. It is composed of the items in Tables 4–6.

Table 4 — state_fullname.english

Identifier	state_fullname.english	**Presence**	M
Description	Full name of Member State. Expressed in English. UTF-8-encoded basic Latin characters		
Encoding format	tstr	**Maximum size**	128 B

Table 5 — state_fullname.national

Identifier	state_fullname.national	**Presence**	O
Description	Full name of Member State. Expressed in national language. ITF-8-encoded full Unicode character set		
Encoding format	[*NationalStateName]	**Maximum size**	Array length: 8

	NationalStateName = {
	language : tstr
	state_fullname : tstr
	}
			Language: 3 B
			state_fullname: 512 B

Table 6 — state_countrycode

Identifier	state_countrycode	**Presence**	M
Description	2-letter code of the issuing state as defined in ICAO Doc 9303 Part 3		
Encoding format	tstr	**Maximum size**	2 B

5.2.1.2. Data unit II — title of the licence

List of titles linked to the licence, when applicable. This data unit is composed of the items in Tables 7 and 8.

Table 7 — title.english

Identifier	title.english	**Presence**	M
Description	Title of the licence. Expressed in English. UTF-8-encoded Latin characters		

Encoding format	[*EnglishLicenceTitle]
	
	EnglishLicenceTitle = {
	title : tstr
	titleissuance: full-date
	}
		Maximum size	Array length: 5
			title: 1 024 B
			titleissuance: 64 B

Table 8 — title.national

Identifier	title.national	**Presence**	O
Description	Title of the licence. Expressed in national language. UTF-8-encoded full Unicode character set		

Encoding format	[*NationalLicenceTitle]
	
	NationalLicenceTitle = {
	language : tstr
	languagetitle: [*LanguageTitle]
	}
	
	Languagetitle = {
	title : tstr
	titleissuance: full-date
	}
		Maximum size	Array length: 8
			language: 3 B
			
			languagetitle:
			Array length: 5
			title: 1 024 B
			titleissuance: 64 B

5.2.1.3. Data unit III — licence number

The licence number is composed of the items in Tables 9 and 10.

Table 9 — serial_number.english

Identifier	Serial_number.english	**Presence**	M
Description	Serial number of the licence. UTF-8-encoded basic Latin characters		
Encoding format	tstr	**Maximum size**	128 B

Table 10 — serial_number.national

Identifier	serial_number.national	**Presence**	O
Description	Serial number of the licence. Expressed in national language. UTF-8-encoded full Unicode character set		

Encoding format	[*NationalSerialNumber]
	
	NationalSerialNumber = {
	language : tstr
	serial_number : tstr
	}
		Maximum size	Array length: 8
			Language: 3 B
			Serial_number: 128 B

5.2.2. Namespace int.easa.epl.personnel.1

The namespace int.icao.epl.general.1 includes data units IVa, IVb, IVc, V and VI of the EPLDS. This namespace has been adapted because, unlike int.icao.epl.general.1, it does not include either the picture (IVa) or the address (V) of the holder of the licence in electronic format.

The signature of the holder of the licence in electronic format (VII) is included in the personnel section of the EPLDS but is not included in the MSO; therefore, it is not included in the EPLDM.

5.2.2.1. Data unit IVb — name of the holder of the licence in electronic format

The 'name of holder in full' data unit provides the name of the licence holder. It is composed of the items in Tables 11–14.

Table 11 — name.latin.primary

Identifier	name.latin.primary	**Presence**	M
Description	Primary name of the holder of the licence issued in electronic format. UTF-8-encoded basic Latin characters Restrictions and recommendations are defined in ICAO Doc 9303 Part 3. If the national characters are not Latin-based, a transcription or transliteration into Latin characters should be provided.		
Encoding format	tstr	**Maximum size**	512 B

Table 12 — name.latin.secondary

Identifier	name.latin.secondary	**Presence**	M
Description	Secondary name of the holder of the licence issued in electronic format. UTF-8-encoded basic Latin characters. Restrictions and recommendations are defined in ICAO Doc 9303 Part 3. If the national characters are not Latin-based, a transcription or transliteration into Latin characters should be provided.		
Encoding format	tstr	**Maximum size**	512 B

Table 13 — name.national.primary

Identifier	name.national.primary	**Presence**	O
Description	Primary name of the holder of the licence issued in electronic format. UTF-8-encoded full Unicode character set		

Encoding format	[*NationalNamePrimary]
	
	NationalNamePrimary = {
	language : tstr
	primary_name: tstr
	}
		Maximum size	Array length: 8
			Language: 3 B
			primary_name: 1 024 B

Table 14 — name.national.secondary

Identifier	name.national.secondary	**Presence**	O
Description	Secondary name of the holder of the licence issued in electronic format. UTF-8-encoded full Unicode character set		

Encoding format	[*NationaNameSecondary]
	
	NationalNameSecondary= {
	language : tstr
	secondary_name : tstr
	}
		Maximum size	Array length: 8
			Language: 3 B
			secondary_name:
			1 024 B

5.2.2.2. Data unit IVc — date of birth

Table 15 — dob

Identifier	dob	**Presence**	M
Description	Year, month, and day on which the holder of the licence issued in electronic format was born		
Encoding format	Full-date	**Maximum size**	10 B

5.2.2.3. Data unit VI – nationality of holder

Table 16 — nationality.english

Identifier	nationality.english	**Presence**	M
Description	Nationality of the holder of the licence issued in electronic format. Expressed in English. UTF-8-encoded Latin characters		
Encoding format	tstr	**Maximum size**	64 B

Table 17 – nationality.national

Identifier	nationality.national	**Presence**	O
Description	Nationality of the holder of the licence issued in electronic format. Expressed in national language. UTF-8-encoded full Unicode character set		

Encoding format	[*NationalNationality]
	
	NationalNationality = {
	language : tstr
	nationality : tstr
	}
		Maximum size	Array length: 8
			Language: 3 B
			nationality: 256 B

Table 18 — nationality.countrycode

Identifier	nationality.countrycode	**Presence**	O
Description	Nationality of the holder of the licence issued in electronic format as 2-letter code as defined in ICAO Doc 9303 Part 3		
Encoding format	tstr	**Maximum size**	2 B

5.2.3. Namespace int.easa.epl.authority.1

5.2.3.1. Data unit VIII — authority and conditions under which the licence is issued

Table 19 — licensing.authority.latin

Identifier	licensing.authority.latin	**Presence**	M
Description	Name of the licensing authority. Expressed in English. UTF-8-encoded Latin characters. Translation to English is recommended		
Encoding format	tstr	**Maximum size**	256 B

Table 20 — licensing.authority.national

Identifier	licensing.authority.national	**Presence**	O
Description	Name of the licensing authority. Expressed in national language(s). UTF-8 encoded using full Unicode character set		

Encoding format	[*NationalLicensingAuthority]
	
	NationalLicensingAuthority = {
	language : tstr
	licensing_authority : tstr
	}
		Maximum size	Array length: 8
			Language: 3 B
			Licensing_authority: 512 B

Table 21 — licensing.conditions.english

Identifier	licensing.conditions.english	**Presence**	M
Description	Conditions under which the licence is issued. Expressed in English. UTF-8-encoded Latin characters. Translation to English is recommended.		
Encoding format	tstr	**Maximum size**	256 B

Table 22 — licensing.authority.national

Identifier	licensing.authority.national	**Presence**	M
Description	Name of the licensing authority in the national language/working language of the licensing authority, UTF-8 encoded using full Unicode character set		

Encoding format	[*NationalLicensingAuthority]
	
	NationalLicensingAuthority = {
	language : tstr
	licensing_authority : tstr
	}
		Maximum size	Array length: 8
			Language: 3 B
			Licensing_conditions: 512 B

5.2.3.2. Data unit IX — certification concerning validity and authorisation for the holder to exercise privileges appropriate to the licence

Table 23 — certification.english

Identifier	certification.english	**Presence**	M
Description	Certification concerning validity and authorisation for the holder to exercise privileges appropriate to the licence. Expressed in English. UTF-8-encoded Latin characters. Translation to English is recommended.		
Encoding format	tstr	**Maximum size**	256 B

Table 24 — certification.national

Identifier	certification.national	**Presence**	O
Description	Certification concerning validity and authorisation for the holder to exercise privileges appropriate to the licence. Expressed in national language(s). UTF-8 encoded using the full Unicode character set		

Encoding format	[*NationalCertification]
	
	NationalCertification = {
	language : tstr
	NationalCertification : tstr
	}
		Maximum size	Array length: 8
			Language: 3 B
			nationalcertification: 512 B

5.2.3.3. Data unit X — electronic signature of officer issuing the licence and the date and time of such issue

This data unit is not included in the MSO; therefore, it is not included in the EPLDM.

5.2.3.4. Data unit XIa — seal or stamp of authority issuing the licence

This data unit is excluded from the MSO.

5.2.3.5. Data unit XIb — date and time of last synchronisation with the server of the issuing authority

This data unit is not included in the MSO; therefore, it is not included in the EPLDM.

5.2.3.6. Data unit XIc — machine-readable code to retrieve authentication data

This data unit is not included in the MSO; therefore, it is not included in the EPLDM.

5.2.4. Namespace int.easa.epl.ratings.1

(a) The namespace int.icao.epl.ratings.1 includes data unit XII of the EPLDS. This namespace is adapted to allow the inclusion of subcategories in the aircraft maintenance licence.

(b) The list of ratings is provided by an array where each rating makes use of a row of the array, and its particularities are provided as attributes of the rating. Table 25 provides a visual example for the ratings array, where each column is an attribute of the rating.

(c) The rating number is not an attribute; it has been added for comprehension purposes, reflecting the fact that each rating of the licence makes use of a row of the array and that the number of rows in the array is limited to 64.

(d) The definition of each one of the attributes is as follows:

(1) Archetype:

The archetype defines which kind of rating is included. It corresponds to a classification of those ratings depending on their nature.

(2) Endorsement:

The endorsement attribute contains the code or value used to endorse a rating. Together with the archetype value, the rating endorsed on the licence is completely identified, because it is known what kind of rating is being endorsed and what its value is.

(3) valid_since:

The valid_since attribute specifies the date on which the endorsement starts to be valid. This is, it can be the date when a rating was endorsed, revalidated or renewed.

(4) valid_until:

This is the date on which the rating endorsed ceases to be valid. It will have no value for non-expiring ratings (not applicable to aircraft maintenance licences).

(5) ir_date:

This is the date on which the instrument rating associated with the rating endorsed expires, if applicable (not applicable to aircraft maintenance licences).

(6) other1:

The other1 column specifies other information associated with the rating, with a preference for privileges linked to the rating that is being endorsed or, in the case of an AML, the category or subcategory to which the rating is linked.

(7) other2:

The other2 column specifies other information associated with the rating, with a preference for the limitations linked to the rating that is being endorsed.

(e) Each type of licence requires a certain degree of standardisation in both taxonomy and methodology when endorsing ratings in licences issued in electronic format. The archetypes available, as well as the taxonomy and methodology of endorsement are provided in AMC2 Point 3.3 of Appendix VI to Part-66.

(f) Therefore, the data model for ratings would be as in Table 27 and Table 28.

Table 25 — ratings.english

Identifier	ratings.english	**Presence**	M
Description	Ratings entered on or associated with the licence. Expressed in English. UTF-8-encoded basic Latin characters		

Encoding format	[*Rating]
	
	Rating = {
	archetype : tstr
	endorsement : tstr
	valid_from : full-date
	valid_until : full-date
	ir_date : full-date
	other_1 : tstr
	other_2 : tstr
	}
		Maximum size	Array length: 64

Table 26 — ratings.national

Identifier	ratings.national	**Presence**	O
Description	Ratings entered on or associated with this licence. Expressed in national language / working language. UTF-8-encoded full Unicode character set		

Encoding format	[*NationalRatings]
	
	NationalRatings = {
	language : tstr
	Ratings : [*Rating]
	}
	
	Rating = {
	archetype : tstr
	endorsement : tstr
	valid_from : full-date
	valid_until : full-date
		Maximum size	Array length: 8
			language: 3 B
			
			Ratings length: 64

	ir_date : full-date other_1 : tstr other_2 : tstr }		

5.2.5. Namespace int.easa.epl.remarks.1

The namespace int.icao.epl.remarks.1 includes data units XIII and XIV of the EPLDS. This namespace has been adapted into the namespace int.easa.epl.remarks.1 and allows the inclusion of national ratings for information to the holder.

5.2.5.1. Data unit XIII – remarks

Data unit XIII – remarks is composed of the items in Tables 27 and 28.

Table 257 — remarks.english

Identifier	remarks.english	**Presence**	M*
Description	Remarks. Expressed in English. UTF-8-encoded Latin characters		
Encoding format	tstr	**Maximum size**	512 B

Table 28 — remarks.national

Identifier	remarks.national	**Presence**	O
Description	Remarks. Expressed in national language(s). UTF-8-encoded full Unicode character set		

Encoding format	[*NationalRemarks]
	
	NationalRemarks = {
	language : tstr
	remarks : tstr
	}
		Maximum size	Array length: 8
			Language: 3 B
			remarks: 1 024 B

5.2.5.2. Data unit XIV — state remarks

This section may be used to include the national ratings that the holder might have. It is composed of the items in Tables 29 and 30.

Table 29 — state_remarks.english

Identifier	State_remarks.english	**Presence**	M*
Description	National ratings entered on or associated with the licence. Expressed in English. UTF-8-encoded basic Latin characters		

Encoding format	[*NationalRating]
	
	NationalRating = {
	archetype : tstr
	endorsement : tstr
	valid_from : full-date
	valid_until : full-date
	ir_date : full-date
	other_1 : tstr
	other_2 : tstr
	}
		Maximum size	Array length: 64

Table 260 — state_remarks.national

Identifier	state_remarks.national	**Presence**	O
Description	National ratings entered on or associated with this licence. Expressed in national language / working language. UTF-8-encoded full Unicode character set		

Encoding format	[*NationalRatingsList]
	
	NationalRatingsList = {
	language : tstr
	NationalRatings : [*NationalRating]
	}
	
	NationalRating = {
	archetype : tstr
	endorsement : tstr
	valid_from : full-date
	valid_until : full-date
	ir_date : full-date
	other_1 : tstr
	other_2 : tstr
	}
		Maximum size	Array length: 8
			language: 3 B
			
			National Ratings length: 64

5.2.6. Namespace int.icao.epl.medical.1

Not applicable to the aircraft maintenance licence.

5.2.7. Namespace int.icao.epl.additional.1

No changes from ICAO specifications.

5.2.8. Namespace int.easa.epl.acronyms.1

This namespace has been included in order to facilitate comprehension for verifiers from third countries who are not familiar with the taxonomy defined in the EU regulations and associated AMC and GM.

5.2.8.1. Data unit – acronyms list

Table 31 — acronyms.english

Identifier	acronyms.english	**Presence**	O
Description	List of acronyms used in the licence with an explanatory description. Expressed in English. UTF-8-encoded Latin characters		

Encoding format	[*Acronym]
	
	Acronym = {
	code : tstr
	description : tstr
	}
		Maximum size	Array length: 25
			code: 10 B
			description: 256 B

Table 32 — acronyms.national

Identifier	Acronyms.english	**Presence**	O
Description	List of acronyms used in the licence with an explanatory description. Expressed in national language(s). UTF-8 encoded using the full Unicode character set		
Encoding format	[*NationalAcronym] NationalAcronym = { language : tstr	**Maximum size**	Array length: 8 Language: 3 B Array length: 25

	acronyms : [*Acronym]
	}
	
	Acronym = {
	code : tstr
	description : tstr
	}
			code: 10 B
			description: 256 B

6. IMPACT OF THE IMPLEMENTATION OF AN EPLSYS

6.1. Impact on the LICSYS when implementing an EPLSYS

(a) The LICSYS is independent from the EPLSYS, so there is no need for the LICSYS to use specific technologies or follow any specific data model. The issuing authorities can make use of solutions that best suit their purposes.

(b) However, prior to deciding any implementation of an EPLSYS, they should be aware of the implications that it can have for their LICSYS and assess whether they are ready and willing to proceed with the implementation.

6.1.1. Need to store the data as structured data

(a) The EPLSYS requires that all the information in the licence issued in physical format be transferred to an Mdoc that follows the EPLDM. Therefore, the information should be stored in the LICSYS as structured data and thus contain all the information about the EPLDS. For example, the licence holder's date of birth is displayed in the licence issued in electronic format, so the database of the LICSYS should have a specific field for this information in order to use it to feed the information to the licence issued in electronic format.
A more problematic example could be the issuing authority officer's electronic signature; usually LICSYSs used for licences issued in physical format do not need to store this signature, because this licence is signed once the licence has been produced and it is signed outside the LICSYS, but if an EPLSYS is implemented, this signature is electronic and should be stored in the LICSYS.

(b) It is not necessary that the LICSYS follow the EPLDM, even though the information from the LICSYS is transferred to the Mdoc, because the issuing authority, when developing the EPLSYS, can use a process that transforms the LICSYS data model into the EPLDM. A LICSYS with a data model aligned with the EPLDM would facilitate the transfer of information between the two systems, but it is not necessary.

(c) The competent authorities should take into consideration that the EPLDM might change with time, so they should prepare their systems to be ready to work with different versions of the EPLDM.

6.1.2. Licence issuance format record

(a) If an issuing authority decides to use both the physical format and the electronic format for the aircraft maintenance licence, the LICSYS will need to keep a record of the format used for each licence that has been issued in order to avoid the possibility that a licence in electronic format can be generated when a licence in physical format exists and vice versa.

(b) The issuing authority cannot issue the same licence in electronic and physical format to the same individual.

6.1.3. Digital identification of the LICSYS users and traceability

(a) The EPLDS has information that comes from different data sources and is validated by people in different roles in the issuing authority (officers).

(b) The validation of the data is performed in the LICSYS and it will need to trace what information is changed or validated, by whom and when. This requires a log of the actions performed by its users.

(c) Internal users of the issuing authority might have access by means of a username and a password, but external users should be properly identified and access the LICSYS with at least two-factor verification in order to guarantee a proper level of security when accessing the LICSYS.

(d) Alternative and superior verification procedures can be applied, as long as they provide at least an equivalent level of security.

6.1.4. Need to use electronic signatures in order to validate the data

(a) The validation of the data is executed by the electronic signature of an issuing officer, responsible for the pertinent subset of licence data of the licence issued in electronic format. Therefore, the LICSYS should be able to operate with the use of electronic signatures.

(b) The electronic signature of the issuing officer is required to conform to recognised standards and have an appropriate level of security. In the EU context, the recognised standard is provided by Regulation (EU) No 910/2014[1] (eIDAS Regulation), and the appropriate level of security is at least an advanced signature.

6.1.5. Authorisation of access to data held by the issuing authority

(a) Without the implementation of an EPLSYS, the data on the IAS can be managed only by internal users of the issuing authority, or possibly by a controlled number of external users within the Member State.

(b) When licences issued in electronic format are used, the information in the IAS will be frequently accessed by external users, either for the generation of licences issued in electronic format or for its verification by organisations, verifiers, and other verifying authorities from third countries.

(c) The EPLSYS will not work if this access is not permitted via web services that allow these external users to access the data. However, granting external parties access to the IAS has an impact on the security measures the issuing authority will have to implement.

6.1.6. Use of the issuing authority's public key infrastructure certificate

(a) Licences issued in electronic format are automatically generated by the IAS when the licence holder sends a request for its generation, and are electronically signed with the IAPKIC. Issuing authorities willing to implement an EPLSYS also need to be willing to use the IAPKIC in automation.

(b) In some Member States, the use of the IAPKIC may require the approval of the government or some kind of national approval process.

6.2. Impact on the issuing authority's procedures when implementing an EPLSYS

(a) An assessment of the impact on the issuing authority's procedures caused by the implementation of an EPLSYS should be carried out in order to identify which procedures should be adapted.

[1] Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (OJ L 257, 28.8.2014, p. 73).

(b) When an EPLSYS is implemented, the concepts of issuance, suspension and revocation of licences should be reviewed because the introduction of electronic documents comes with certain conventions within the digital world that challenge the standard practices with physical documents.

GM1 Point 3.1 and Point 3.2 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

ELECTRONIC PERSONNEL LICENCE SYSTEM

(a) Implementing the electronic personnel licence system

(1) The issuance of electronic personnel licences by the competent authority is optional.

However, the Convention on International Civil Aviation (Doc 7300), Annex 1 – 'Personnel licensing' mentions the obligation for all ICAO States to recognise them.

(2) The electronic personnel licence system can be scalable to the needs of each competent authority, its service providers, licence holders, and applicants.

An efficient electronic personnel licence system will be achieved through thoughtful planning and implementation, ensuring that it meets not only requirements of the Convention on International Civil Aviation (Doc 7300) and its Annexes, but also the applicable national and European regulations.

(3) When implementing an electronic personnel licence system, the competent authority may also take into consideration its integration with already existing licensing systems, including, but not limited to:

(i) initial issuance of the licence;

(ii) licence conversion, limitation, revocation, or suspension;

(iii) integration with the software used by the competent authority; and

(iv) links to other IT frameworks required (e.g. other Member State entities, organisations), when applicable.

(4) Prior to introducing the electronic personnel licence system, the competent authority may consider the following aspects:

(i) Regulatory framework

The competent authority is expected to determine whether the current national regulatory framework would allow the implementation of the electronic personnel licence system regulations (e.g. privacy laws, relevant information technology regulations, data protection). If not, the Member State of the competent authority may need to amend its current national regulations or introduce new regulations.

(ii) Risk analysis

The electronic personnel licence system will inherently be exposed to new risks.

In order to address new risks, the introduction of the system may be driven by the results of a risk assessment in each phase of the project. A risk assessment could be a part of the competent authority's integrated risk management that would allow the identification and evaluation of common risks, as well as the development of an action plan that addresses key risks and effective mitigations of those risks.

The electronic personnel licence system may be incorporated in the information security management system of the competent authority or in a suitable equivalent, which is used by the competent authority. Guidance on conducting risk assessment is provided in the Safety Management Manual (Doc 9859).

(iii) Resources.

The competent authority is expected to ensure that it has sufficient resources to introduce and maintain an electronic personnel licence system. This includes financial resources, as well as human resources.

If the competent authority does not have qualified personnel to develop and maintain its electronic personnel licence system, some of the work may be outsourced.

The competent authority may invest time and resources not only in implementation, but also in equipment and technology, the work environment, employees, and operating systems.

The competent authority may be prepared to invest in the systems and processes as well as to develop policies that provide optimal global interoperability and performance of the electronic personnel licence system.

(iv) Service providers and licence holders.

The competent authority is expected to consider how the electronic personnel licence system will affect its service providers, licence holders, and applicants.

(5) It is recommended that the competent authority prepares a comprehensive project initiation document defining the scope, the impact on the existing national licensing system, a risk assessment, the electronic personnel licence system features, and other elements.

(6) While developing the electronic personnel licence system, it is advisable to consider the potential scalability of the system in terms of how the system could be applied to other licensing or certification areas, in order to capitalise on the work involved and the know-how developed by the competent authority during the implementation of the electronic personnel licence system.

(7) It is advisable to conduct a post-implementation analysis of the electronic personnel licence system in order to capture the lessons learned and the benefits of the realisation of the project.

(b) Features of the electronic personnel licence system

(1) The electronic personnel licence system typically consists of the following major parts:

(i) a server-based licence management system with a user interface management system;

(ii) an application(s) installed on a self-contained mobile electronic visual display device(s); and

(iii) a system to support surveillance activities by the competent authority's own inspectors and by inspectors from other authorities, as suitable.

(2) The purpose of the application installed on a self-contained mobile electronic visual display device is to provide the licence holder with a means to show the approved and updated privileges conferred upon the individual by the competent authority.

Secure communication between the electronic personnel licence system of the competent authority and the self-contained mobile electronic visual display device can be via the internet or other electronic means as deemed appropriate by the competent authority.

(3) In addition, the electronic personnel licence system can enable authorised persons to perform verification.

(c) Expected level of performance

The competent authority intending to introduce an electronic personnel licence system may ensure the following:

(1) a high degree of security preventing forgery, data leaks and other security events;

(2) highly reliable delivery of the correct information, at the right time and to the right person;

(3) the ability to detect corrupted data and service interruptions, and to initiate timely corrective actions;

(4) the ability of the electronic personnel licence system to be used for verification purposes in circumstances where electronic access to the information is not possible; and

(5) robust contingency arrangements to manage unexpected events; for example, in the event of a primary component outage of the electronic personnel licence system within the competent authority, a process to transfer to back-up systems in order to maintain the availability of the data.

(d) Electronic personnel licence system elements

The electronic personnel licence system may include the following:

(1) infrastructure for processing, storage, network communications, security and other enabling software and hardware;

(2) data access to provide secure licence information resource support for services related to the electronic personnel licences, licence holders and persons authorised to verify the authenticity, validity, and content of the licences, as well as a comprehensive level of integration with the regulatory information management system of the competent authority;

(3) a business application to provide services for the issue, revocation, suspension, or limitation of aircraft maintenance licences issued in electronic format, and for the display, query, verification, and record-keeping of the electronic personnel licences;

(4) a user-friendly interface that provides correct data to the right addresses when needed;

The system architecture of the electronic personnel licence system may be supported with security controls in layers providing role-based access to data, as well as operations and maintenance support functions.

The integration of these controls and functions may be aligned with relevant and appropriate standards and specifications, as well as regulatory system integration standards and requirements. It is recommended not to implement single points of failure in any of the layers.

(e) Compliance with the applicable national and EU regulations, including privacy and personal data protection

The electronic personnel licence system is subject to compliance with the applicable national and EU regulations, including the privacy and data protection laws.

In reviewing the privacy and data protection laws, Member States may consider the following:

(1) What is personal data?

(2) What personal data is collected and for what purposes?

(3) How is personal data retained?

(4) With whom will personal data be shared and for what purposes?

(5) How long is personal data retained?

(6) Is there any international transfer of personal data? Where? Under which legal basis?

(7) How can data subjects access, update, delete, or correct their personal data?

(8) What steps are taken to ensure the security of personal data?

(9) Whom can data subjects contact to exercise their rights in accordance with national and EU regulations on personal data protection?

(10) What is the complaint process?

(f) Security specifications

(1) The competent authority intending to implement an electronic personnel licence system may consider ensuring a high degree of security to prevent forgery, data leaking and other security events.

Information security as well as compliance with the applicable national and EU regulations concerning information security may be considered during all phases.

(2) The main areas of security risks may include:

(i) loss or inauthenticity of data (e.g. invalidity, spoofing),

(ii) network or device malware infection, and

(iii) protection of private data.

(3) A risk assessment may be performed by the competent authority in order to identify the major risks associated with an electronic personnel licence system.

In addition, it is recommended that a register of identified risks be maintained to minimise the likelihood that the competent authority will lose sight of its known risks.

(g) Training and supporting guidance material

(1) The development of training and supporting guidance material, as appropriate to their roles and responsibilities, is recommended for all personnel who may interact with the electronic personnel licence system. Such personnel may include licence applicants and holders, competent authority personnel, inspectors (both domestic and foreign) and electronic personnel licence system maintenance personnel.

Possible training and guidance topics could include:

(i) the use of the electronic personnel licence system, including its features and capabilities;

(ii) the online and offline verification of the authenticity, validity, and content of the electronic personnel licences, including the use of any tools or applications, as well as the description of included features (e.g. active security features to differentiate it from a static image);

(iii) contingency actions, including cases of loss of or damage to the self-contained mobile electronic visual display device used for the electronic personnel licences;

(iv) any other training and guidance that a competent authority may find to be necessary.

(2) In addition to the topics identified in point (1), it is recommended that personnel whose responsibilities include verifying, adding, deleting, amending, or approving amendments to the licensing data of electronic personnel licences also receive regularly updated training in the following subjects:

(i) administration of the electronic personnel licence system, including record-keeping, maintenance, and troubleshooting;

(ii) security training and awareness; and

(iii) training in monitoring of emerging risks.

AMC1 Point 3.3 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

SCRIPT SIGNATURE OF THE HOLDER IN AIRCRAFT MAINTENANCE LICENCES IN ELECTRONIC FORMAT

The competent authority should acquire the script signature of the applicant for the issuance or change of an aircraft maintenance licence, as required under Section VII, through appropriate and efficient means.

Such means should be integrated with the application process defined in point 66.A.10 and Appendix V to Part-66 by requiring the applicant to either:

— sign in the appropriate field of the application documentation in physical format, as defined by the competent authority; or

— draw their signature in a dedicated field before submitting their application electronically; or

— provide or upload an image of their script signature through an online platform or other means deemed acceptable by the competent authority.

AMC2 Point 3.3 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

TAXONOMY FOR ENDORSEMENTS IN AIRCRAFT MAINTENANCE LICENCES ISSUED IN ELECTRONIC FORMAT

Aircraft maintenance licences issued in electronic format need to be readable by verifying devices worldwide to achieve interoperability.

For that purpose, a common information structure that any device can process should be established, so that reading applications developed by other authorities other than the issuing authority will be effective.

Therefore, licences issued in electronic format should be endorsed using a list of values specific to each category, subcategory, or rating (hereinafter referred to as endorsements) being included or endorsed in Section XII of the licence.

In addition, as licences may contain more than one category, subcategory, or rating, an array is necessary to list all the applicable endorsements.

The values and the array are defined and structured through the namespace 'int.easa.epl.ratings.1' in Section 4.2.4 of AMC1 Point 3.1 and Point 3.2 of Appendix VI to Part-66, with the attributes in Table 1.

Table 27 – EASA endorsement array

Endorsement No	archetype	endorsement	valid_since	valid_until	ir_valid_until	other1	other2
1							
2							
3							
4							
…							
64							

Note: The endorsement number is not part of the array but is presented to reflect the fact that each endorsement makes use of a row and that the array is limited to 64 endorsements.

For each endorsement, each column of the array contains information as defined in the list of values set out in Parts 1, 2, 3, and 4 of this AMC.

1. Archetypes for the aircraft maintenance licence

All endorsements belong to an archetype, which can be seen as a grouping of endorsements with similar characteristics and a common information type.

Table 2 – AML archetypes

Archetype	Description
aml_category	This archetype groups the categories and subcategories that can be included in the aircraft maintenance licence as defined in point 66.A.3.
aml_aircraft_rating	This archetype groups all the endorsements of aircraft ratings as defined in point 66.A.45, including aircraft type ratings as listed in Appendix I to AMC to Annex III (Part-66).
aml_system_rating	This archetype groups all the system ratings associated with category B2L as defined in point 66.A.3(d).
aml_national_rating	This archetype is available only for information purposes. It groups all the national ratings granted by a competent authority that are under national legislation and outside the scope of Commission Regulation (EU) No 1321/2014 (Part-66).

2. Title taxonomy

Table 3 – Aircraft maintenance licence title taxonomy

Endorsement	Description
Part-66 AML	Part-66 AIRCRAFT MAINTENANCE LICENCE

3. Endorsements taxonomy

Table 4 – Endorsements taxonomy for aircraft maintenance licences

Endorsement	Description	Standardised privileges/limitations	Comments
A	Category A	This attribute is not used	This category cannot be included without the inclusion of at least one of its subcategories
A1	Aeroplanes Turbine	This attribute is not used	66.A.3(a) 66.A.20(a)(1)
A2	Aeroplanes Piston	This attribute is not used	
A3	Helicopters Turbine	This attribute is not used	
A4	Helicopters Piston	This attribute is not used	
B1	Category B1	This attribute is not used	This category cannot be included without the inclusion of at least one of its subcategories
B1.1	Aeroplanes Turbine	This attribute is not used	66.A.3(b) 66.A.20(a)(2)
B1.2	Aeroplanes Piston	This attribute is not used	
B1.3	Helicopters Turbine	This attribute is not used	
B1.4	Helicopters Piston	This attribute is not used	
B2	Category B2	This attribute is not used	66.A.3(c) 66.A.20(a)(3)
B2L	All aircraft other than those in Group 1 as set out in point 66.A.5(1)	This attribute is not used	66.A.3(d) 66.A.20(a)(4)
B3	Piston-engine non-pressurised aeroplanes of 2000 kg MTOM and below	This attribute is not used	66.A.3(e) 66.A.20(a)(5)
C	Aeroplanes and Helicopters	- Complex motor-powered aircraft, or - Aircraft other than complex motor-powered aircraft	66.A.3(g) 66.A.20(a)(7)
L	Category L	This attribute is not used	This category cannot be included without the inclusion of at least one of its subcategories
L1C	Composite sailplanes	This attribute is not used	66.A.3(f) 66.A.20(a)(6)
L1	Sailplanes	This attribute is not used	
L2C	Composite powered sailplanes and composite ELA1 aeroplanes	This attribute is not used	
L2	Powered sailplanes and ELA1 aeroplanes	This attribute is not used	
L3H	Hot-air balloons	This attribute is not used	
L3G	Gas balloons	This attribute is not used	
L4H	Hot-air airships	This attribute is not used	
L4G	ELA2 gas airships	This attribute is not used	

Endorsement	Description	Standardised privileges/limitations	Comments
L5	Gas airships other than ELA2	This attribute is not used	
TTTT	Aircraft rating	This attribute is not used	66.A.45(a)
YYYY	System rating	This attribute is not used	66.A.3(d) 66.A.20(a)(4)
XXXX	National rating	This attribute is not used	Point 1.5 of Appendix VI to Part-66 The endorsement of national ratings is done as determined by each competent authority.

4. Endorsement methodology

Endorsements on aircraft maintenance licences should be made by specifying the values in Table 5.

Table 5 — Rating endorsement methodology for aircraft maintenance licences

Archetype	Endorsement	valid_since	valid_until	ir_date	other_1	other_2
aml_category	**A** Not to be endorsed without subcategories	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Category A limitations to be specified here
aml_category	**A1**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory A1 limitations to be specified here
aml_category	**A2**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory A2 limitations to be specified here
aml_category	**A3**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory A3 limitations to be specified here
aml_category	**A4**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory A4 limitations to be specified here

Archetype	Endorsement	valid_since	valid_until	ir_date	other_1	other_2
aml_category	**B1** Not to be endorsed without subcategories	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Category B1 limitations to be specified here
aml_category	**B1.1**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory B1.1 limitations to be specified here
aml_category	**B1.2**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory B1.2 limitations to be specified here
aml_category	**B1.3**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory B1.3 limitations to be specified here
aml_category	**B1.4**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory B1.4 limitations to be specified here
aml_category	**B2**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Category B2 limitations to be specified here
aml_category	**B2L**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Category B2L limitations to be specified here
aml_category	**B3**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Category B3 limitations to be specified here

Archetype	Endorsement	valid_since	valid_until	ir_date	other_1	other_2
aml_category	**C**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	- Complex motor-powered aircraft, or - Aircraft other than complex motor-powered aircraft	Category C limitations to be specified here
aml_category	**L** Not to be endorsed without subcategories	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Category L limitations to be specified here
aml_category	**L1C**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L1C limitations to be specified here
aml_category	**L1**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L1 limitations to be specified here
aml_category	**L2C**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L2C limitations to be specified here
aml_category	**L2**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L2 limitations to be specified here
aml_category	**L3H**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L3H limitations to be specified here

Archetype	Endorsement	valid_since	valid_until	ir_date	other_1	other_2
aml_category	**L3G**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L3G limitations to be specified here
aml_category	**L4H**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L4H limitations to be specified here
aml_category	**L4G**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L4G limitations to be specified here
aml_category	**L5**	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	This attribute is not used	Subcategory L5 limitations to be specified here
aml_aircraft_rating	**TTTT** One row for each aircraft rating: type, manufacturer subgroup, or full group rating or as specified for B3 category and L subcategories	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	The category or sub-category associated to the aircraft rating goes here	Limitations for the aircraft rating to be specified here
aml_system_rating	**YYYY** One row for each system rating	**dd/mm/yyyy** Date of first obtention	This attribute is not used	This attribute is not used	Category B2L	Limitations for the system rating to be specified here
aml_national_rating	**XXXX** One row for each national rating	**dd/mm/yyyy** As determined by the competent authority	This attribute is not used	This attribute is not used	As determined by the competent authority	As determined by the competent authority

GM1 Point 3.4 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

FEATURES TO DISPLAY THE CONTENTS OF AIRCRAFT MAINTENANCE LICENCES ISSUED IN ELECTRONIC FORMAT IN ENGLISH

Any feature to display the contents of the licence in English is meant to be usable by the licence holder or reader to switch from any of the languages the licence includes to English and, therefore, to be easily identifiable, in part through the recognition of the ICAO acronym.

When the information in the licence is already displayed in English, the same feature could be used to revert to any other language included in the licence.

When English is the only language used to issue the licence, the ICAO acronym is still expected to appear on the licence.

GM1 Point 3.5 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

ACTIVE SECURITY FEATURES OF AIRCRAFT MAINTENANCE LICENCES ISSUED IN ELECTRONIC FORMAT

Active security features include dedicated visual effects triggered by specific actions such as tilting the device, shaking it, or touching the screen.

Such visual effects typically cannot be replicated using images of the licence captured through a screenshot or another device.

GM1 Point 3.7 of Appendix VI to Part-66 – Aircraft maintenance licence — EASA Forms 26 and 206

VERIFICATION OF THE AUTHENTICITY, VALIDITY, AND CONTENT OF AIRCRAFT MAINTENANCE LICENCES ISSUED IN ELECTRONIC FORMAT

(a) The verification described under this point allows the reader to confirm that the licence is authentic, meaning that it was issued by the competent authority mentioned in the licence, and is valid, meaning that its content is not outdated and displays the current holder's licensing data.

(b) Verifying the authenticity and validity of licences issued in electronic format may happen in two ways:

(1) By using a reading device registered with the authority that issued the licence to read the machine-readable code included under Section XIc of the licence.

Such a device can be used when it is connected to the internet or if it was previously linked with the issuing authority's list of valid public key infrastructure (PKI) certificates.

The issuing authority's PKI certificates are used to sign all licences in electronic format; they attest to the authenticity and validity of the licences in real time when the licence is verified with internet connectivity available or at the time they were downloaded from the authority's server when the verification happens offline.

When it is expected that the verification will happen offline, the person authorised to verify the authenticity, validity, and content of licences on behalf of the competent authority can ensure that they will be in possession of the most recent version of the list of the valid issuing authority's PKI certificates.

(2) By only reading the information contained in the licence of the holder when no internet connectivity is available and the authorised person is not in possession of the list of the valid issuing authority's PKI certificates.

In such situations, the authorised person can compare the latest synchronisation date of the licence with the current date.

Using the information available, it can be assessed whether the information in the licence presented by the holder is up to date.

The person authorised to verify the authenticity, validity, and content of licences can request support in accessing information in the authority's server if there is any suspicion that the licence displays outdated content.

The authorised person may also decide to verify the authenticity, validity, and content of the licence again when or where internet connectivity is available within the 24-hour timeframe mentioned under point 66.A.55.

The update status of a licence may also be indicated by a notification system developed by the issuing authority stating that the latest update has not yet been manually triggered by the licence holder and, thus, that the content of the licence may be outdated.

ANNEX VD (PART-CAO)

AMC1 CAO.A.025 Combined airworthiness exposition (CAE)

[…]

Chapter	Description	Implementing rule reference
[…]		
~~B.13~~	~~Procedure for the issue of a recommendation to the competent authority for the issue of a Part-66 licence in accordance with point 66.B.105 (limited to the cases where the competent authority for the Part-CAO approval and for the Part-66 licence is the same).~~	~~66.B.105~~
[…]		