European Union Aviation Safety Agency



Notice of Proposed Amendment 2024-08 (A)

in accordance with Article 6(1) of MB Decision 01-2022

Enabling electronic personnel licensing in Europe

RMT.0737

EXECUTIVE SUMMARY

The purpose of this rulemaking activity is to establish the requirements for the introduction and implementation of personnel licences in electronic format (electronic personnel licences (EPLs)) within the EU regulatory framework. The objectives are to:

- enable the issuance, display, validation, and verification of EU EPLs on self-contained mobile electronic visual display devices, in addition to the traditional physical format (e.g. paper or plastic cards). EPLs will be optional, but national competent authorities (NCAs) shall recognise personnel licences issued in electronic format not only by other EU Member States (MSs) but also by all ICAO Contracting States;
- 2. ensure the security, confidentiality, data protection, integrity, authentication and accessibility of EPLs;
- 3. ensure the interoperability of electronic personnel licence systems (EPLSYS) used by different NCAs and stakeholders;
- 4. incorporate ICAO Annex 1 Standards and Recommended Practices (SARPs) related to implementing an EPLSYS into the relevant EU aviation regulations.

To enable the introduction of personnel licences issued in electronic format and the EPLSYS, amendments are proposed to several regulations. The main topics addressed through the new or amended requirements and associated AMC and GM include:

- new definitions related to the introduction of EPLs;
- new authority requirements on the establishment of EPLSYS enabling authorities to generate, manage and verify such licences;
- new technical specifications for the issuance of EPLs and the establishment of an EPLSYS, based on the ISO/IEC 18013 5:2021 International Standard and ICAO Doc 10190;
- new EASA Forms for EPLs;
- transitional measures related to the inclusion of medical certificate information in EPLs (for pilot and air traffic controller licences only), allowing authorities to start issuing EPLs while continuing to issue medical certificates in the traditional physical (paper) format;
- provisions permitting EPLs to include information on national privileges outside the scope of EU regulations (e.g. related to 'Annex I aircraft'), issued in accordance with national legislation and valid only within the territory of the issuing MS;
- simplifications with regard to the current ICAO EPL format, removing the need to include the photograph of the holder,
 the script signature of the holder (except in the maintenance domain), and the seal or stamp of the issuing authority.

REGULATION(S) TO BE AMENDED

- Commission Regulation (EU) No 1178/2011 (aircrew);
- Commission Regulation (EU) 2015/340 (air traffic controllers' licences and certificates);
- Commission Regulation (EU) No 1321/2014 (continuing airworthiness);
- Commission Regulation (EU) No 2018/1976 (sailplanes);
- Commission Regulation (EU) No 2018/395 (balloons).

ED DECISION(S) TO BE AMENDED

ED Decisions that issue the acceptable means of compliance (AMC) and guidance material (GM) to support the application of those Regulations

AFFECTED STAKEHOLDERS

NCAs, holders of a pilot licence, holders of an air traffic controller licence, holders of an aircraft maintenance licence; instructors; examiners; training organisations; aircraft operators; maintenance organisations; aero-medical examiners and aero-medical centres.

WORKING METHODS			
Development	Impact assessment(s)	Consultation	
By EASA with external support	Light	Public – NPA	

RELATED DOCUMENTS / INFORMATION

ToR RMT.0737, issued on 20.9.2022

PLANNING MILESTONES: Refer to the latest edition of EPAS Volume II.

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1. **About this NPA**

1.1. How this regulatory material was developed

The European Union Aviation Safety Agency (EASA) developed this Notice of Proposed Amendment (NPA) in line with Regulation (EU) 2018/1139¹ (the 'Basic Regulation') and the Rulemaking Procedure², in the context of Rulemaking Task (RMT).0737. This task is included in Volume II of the European Plan for Aviation Safety (EPAS) for 2023-2025³ and its scope and overall timescales are defined in the related Terms of Reference (ToR)4.

This regulatory proposal was developed by EASA with the support of rulemaking group (RMG).0737.

1.2. How to comment on this NPA

The NPA is hereby submitted to all interested parties for consultation in accordance with Article 115 of the Basic Regulation, and Article 6(1) of the Rulemaking Procedure.

Please submit your comments using exclusively the dedicated Comment-Response Tool (CRT) available at https://hub.easa.europa.eu/crt/.

The deadline for the submission of comments is 19 March 2025.

1.3. The next steps

Following the consultation of the draft regulatory material, EASA will review with the support of RMG.0737 all the comments received and will duly consider them in the subsequent phases of this rulemaking activity.

Considering the above, EASA may issue an Opinion proposing amendments to the following Regulations:

Commission Regulation (EU) No 1178/2011⁶ (aircrew); (a)

Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (OJ L 212, 22.8.2018, p. 1) (http://data.europa.eu/eli/reg/2018/1139/oi).

EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation (EU) 2018/1139. Such a process has been adopted by the EASA Management Board (MB) and is referred to as the 'Rulemaking Procedure'. See MB Decision No 01-2022 of 2 May 2022 on the procedure to be applied by EASA for the issuing of opinions, certification specifications and other detailed specifications, acceptable means of compliance and guidance material ('Rulemaking Procedure'), and repealing Management Board Decision No 18-2015 (EASA MB Decision No 01-2022 on the Rulemaking Procedure, repealing MB Decision 18-2015 (by written procedure) | EASA (europa.eu)).

European Plan for Aviation Safety (EPAS) 2023-2025 | EASA (europa.eu)

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In case of technical problems, please send an email with a short description at crt@easa.europa.eu.

Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 311, 25.11.2011, p. 1) (http://data.europa.eu/eli/reg/2011/1178/oj).

- (b) Commission Regulation (EU) 2015/340⁷ (air traffic controllers' licences and certificates);
- (c) Commission Regulation (EU) No 1321/20148 (continuing airworthiness);
- (d) Commission Implementing Regulation (EU) 2018/1976⁹ (sailplanes);
- (e) Commission Regulation (EU) 2018/395¹⁰ (balloons).

The Opinion will be submitted to the European Commission which shall consider its content and decide whether to issue amendments to the related Regulations.

When issuing the Opinion EASA will also provide feedback to the commentators and information to the public on who engaged in the process and/or provided comments during the consultation of the draft regulatory material, which comments were received, how such engagement and/or consultation was used in rulemaking, and how the comments were considered. Further to the issuing of the Opinion, EASA will issue Decisions with associated AMC and GM to support the application of the above-mentioned Regulations.

¹⁰ Commission Regulation (EU) 2018/395 of 13 March 2018 laying down detailed rules for the operation of balloons pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 71, 14.3.2018, p. 10) (http://data.europa.eu/eli/reg/2018/395/oj).



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Commission Regulation (EU) 2015/340 of 20 February 2015 laying down technical requirements and administrative procedures relating to air traffic controllers' licences and certificates pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 923/2012 and repealing Commission Regulation (EU) No 805/2011 (OJ L 63, 6.3.2015, p. 1) (http://data.europa.eu/eli/reg/2015/340/oj)

⁸ Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1) (http://data.europa.eu/eli/reg/2014/1321/oj).

⁹ Commission Implementing Regulation (EU) 2018/1976 of 14 December 2018 laying down detailed rules for the operation of sailplanes pursuant to Regulation (EU) 2018/1139 of the European Parliament and of the Council (OJ L 326, 20.12.2018, p. 64) (https://data.europa.eu/eli/reg_impl/2018/1976/oj).

2. In summary — why and what

2.1. Why we need to act — issue/rationale

Having regard to the adopted Amendment 178 to ICAO Annex 1 regarding the introduction of the electronic personnel licence¹¹, EASA needs to act to transpose these ICAO requirements into the EU regulatory framework. Failing to do so may lead to difference with the ICAO SARPs and even difficulty in accepting personnel licences issued in electronic format by other ICAO Contracting States in the EU. The latter is due to the fact that the ICAO Annex 1 amendments set up an obligation for all ICAO Contracting States to accept personnel licences issued in electronic format issued by other Contracting States, although the issuance of personnel licences in electronic format remains a free choice. In order to ensure transposition of ICAO standards and to promote level playing field across EU MSs, EASA decided to take a regulatory action through RMT.0737.

2.2. Description of the issue

At present, the EU regulatory framework does not address the issuance and management of personnel licences issued in electronic format. However, ICAO through the adoption of Amendment 178 to Annex 1 has introduced provisions allowing ICAO Contracting States to introduce personnel licences issued in electronic format and ensuring their recognition amongst all ICAO Contracting States.

2.3. Assessment of the issue

Amendment 178 to ICAO Annex 1 refers to the introduction of personnel licences issued in electronic format. In the EU regulatory framework, personnel licences are regulated in three domains: aircrew for pilot licences, continuing airworthiness for aircraft maintenance licences, and ATCO for (student) air traffic controller licences.

Currently no EU MS issues personnel licences in electronic format in the aircrew domain, even though there is a strong interest from some EU MSs, having regard to the pace of their digitalisation.

In the continuing airworthiness and ATCO domains, there are some individual initiatives from EU MSs to issue personnel licences in electronic format in addition to the licence issued in physical format, but they do not follow common standards. If not addressed in the future, the current situation may lead to significant differences and a global lack of interoperability.

Considering the digitalisation and automation in the aviation, as well as interest of EU MSs to introduce personnel licences issued in electronic format, as is the case in other transport domains (e.g. electronic driving licences), there is a clear need for an EU regulatory framework which will enable proper issuance and oversight of the personnel licences issued in electronic format by the EU MS competent authorities.

2.4. Who is affected by the issue

Stakeholders affected are the NCAs of the EU MSs, holders of a pilot licence, holders of an ATCO licence, holders of an aircraft maintenance licence, instructors, examiners, training organisations,

¹¹ While ICAO Annex 1 uses the term 'electronic personnel license' (EPL), this NPA uses the term 'personnel licence issued in electronic format'.



TE.RPRO.00034-013 © European Union Aviation Safety Agency. All rights reserved. ISO 9001 certified. Proprietary document. Copies are not controlled. Confirm revision status through the EASA intranet/internet. aircraft operators, maintenance organisations, aero-medical examiners and aero-medical centres. The stakeholders would be not equally affected. As the decision to introduce personnel licences issued in electronic format is voluntary, the affected stakeholders would be mainly those of the EU MSs where personnel licences will be issued in electronic format. Nevertheless, all other EU MSs have an obligation to accept personnel licences issued in electronic format. Consequently, these EU MSs would be affected, even though they have not (yet) issued personnel licences issued in electronic format.

2.5. How could the issue evolve

A lack of regulatory action to introduce licences issued in electronic format may result in:

- difference of the EU regulatory framework from ICAO Annex 1 SARPs as regards the personnel licences issued in electronic format;
- difficulty for the RAMP inspectors to verify (third-country) personnel licences issued in electronic format due to the lack of harmonised requirements regulating the issuance and validation of the personnel licences issued in electronic format.

In addition to the above, if an EU MS decides to develop its own tools for issuing personnel licences issued in electronic format (due to the lack of common EU requirements), this may lead to proliferation/divergence of different tools. Consequently, it might result in lack of standardisation of the personnel licences issued in electronic format across EU, and put at risk the interoperability between the IT systems developed by different EU MSs.

2.6. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. The introduction of personnel licences issued in electronic format is a strategic priority outlined in the EPAS, in line with the growing digitalisation of EU public services. It aligns with the EU strategy aimed at modernising the administration of personnel licences, fostering interoperability of cross-border systems among licensing authorities to facilitate the movement of aviation personnel, and enabling digital interactions between licensing authorities and aviation personnel to enhance service quality. Besides, personnel licences issued in electronic format contribute to the prevention of licence fraud and forgery via enhanced security means to authenticate and control access to licences. Furthermore, this regulatory proposal aims at introducing personnel licences issued in electronic format in the EU regulatory framework, following the adoption of Amendment 178 to ICAO Annex 1 Personnel Licensing.

The specific objectives of this proposal are to develop and establish the requirements for introducing personnel licences issued in electronic format within the EU regulatory framework to:

- allow the issuance, display, validation and verification of EU personnel licences issued in electronic format on self-contained mobile electronic visual display devices, as an alternative to licences issued in physical format (licences printed on paper or other suitable materials, including plastic cards). Personnel licences issued in electronic format will be an option available to an EU MS to adopt in lieu of a licence issued in physical format, but EU MSs shall recognise personnel licences issued in electronic format issued by all other ICAO Contracting States;
- (b) ensure the security, confidentiality, data protection, integrity, authentication and accessibility of personnel licences issued in electronic format; and

(c) ensure interoperability of the electronic personnel licence systems (EPLSYS) employed by different NCAs and relevant stakeholders.

This RMT sets the stage for a competitive European market for digital solutions while granting flexibility to EU MSs, allowing them to develop their own IT systems and tools to facilitate the introduction of licences in electronic format.

Furthermore, EASA needs to embrace this topic by enabling personnel licences issued in electronic format in three domains. Instead of having three different rulemaking tasks for each domain, EASA considers that the issue can be addressed by applying a total system approach and initiating a single RMT which encompasses the common standards for issuance and oversight of personnel licences issued in electronic format across the three domains.

2.7. How we want to achieve it — overview of the proposed amendments

To achieve the aforementioned objectives, EASA shall undertake the following:

- (a) Establish a standardised EASA form for personnel licences issued in electronic format, following the ICAO Annex 1 SARPs. This EASA form will address the specific needs of the aviation sectors within the scope of this RMT, including flight crew licences, ATCO licences, and aircraft maintenance licences. The implementation of this EASA form will promote full recognition and standardisation of personnel licences issued in electronic format among all EU MSs and aims to encourage comprehensive acknowledgment and standardisation of EU personnel licences issued in electronic format globally across ICAO Contracting States.
- (b) Set requirements, functionalities and performance standards for the IT systems and related infrastructure (EPLSYS) used for issuing, displaying and verifying personnel licences issued in electronic format securely, accessibly, and in an interoperable way, while ensuring confidentiality and data protection. These requirements should address how the EPLSYS interacts with the existing national personnel licence systems (LICSYS) of EU MSs, including their examiners and training organisations. Common standards for information security, access rights and methods for verifying personnel licences issued in electronic format authenticity should be outlined, enabling consistent implementation of the EPLSYS across all EU MSs.
- (c) Define the roles and responsibilities of NCAs and, where relevant, examiners for issuing, amending, renewing and overseeing personnel licences issued in electronic format.
- (d) Develop domain-specific requirements for the implementation of the EPLSYS in various personnel licensing domains (such as flight crew licences, ATCO licences, aircraft maintenance licences), as needed.
- (e) Permit each EU MS to develop IT systems and tools, based on the EASA form, for issuing personnel licences in electronic format under their oversight. These systems and tools should conform to common EU standards and specifications, promoting standardised and uniform implementation of the EPLSYS across EU MSs. This approach will ensure interoperability of the EPLSYS across different IT systems.

The following domain-specific regulations are proposed to be amended to make the introduction of the licences issued in electronic format and the EPLSYS possible in the three domains:

Aircrew:

- Commission Regulation (EU) No 1178/2011 (aircrew);
- (b) Commission Implementing Regulation (EU) 2018/1976 (sailplanes);
- Commission Regulation (EU) 2018/395 (balloons). (c)

ATCO:

- (d) Commission Regulation (EU) 2015/340 (air traffic controllers' licences and certificates); Continuing airworthiness:
- Commission Regulation (EU) No 1321/2014 (continuing airworthiness). (e)

2.7.1. Amendments applicable to all domains within the RMT scope

2.7.1.1. Introduction of the personnel licence in electronic format

This NPA proposes to introduce the possibility to issue personnel licences in electronic format, as an alternative to the traditional issuance of licences in physical format (paper, plastic card). This is in line with ICAO Annex 1 Chapter 5.1.1, which now gives the possibility to issue personnel licences in physical format (hard copy) or to issue personnel licences in electronic format.

In line with the amended ICAO provisions, personnel licences will therefore have to conform to one of the following specifications:

- licences issued on first quality paper or other suitable material, including plastic cards; or (a)
- (b) personnel licences issued in electronic format on self-contained mobile visual electronic display devices.

2.7.1.2. New definitions regarding the introduction of the personnel licence in electronic format

This NPA proposes to include new definitions in each domain-specific regulation (Commission Regulation (EU) No 1178/2011 (aircrew); Commission Regulation (EU) 2015/340 (ATCO) and Commission Regulation (EU) No 1321/2014 (continuing airworthiness)): two new definitions regarding the licence issued in physical format and the licence issued in electronic format, one new definition regarding the electronic personnel licence system (EPLSYS), and one new definition regarding the device on which the licence issued in electronic format is displayed.

This self-contained mobile electronic visual display device is normally a small portable device that can easily be carried by a single individual. This device is designed to operate, transmit and receive information without a wired connection and possesses local, non-removable or removable data storage. The device includes a self-contained power source, display, and a means for the holder of the portable computing device to interact with it.

This NPA also proposes to include a new definition regarding the licence in general (for all three domain-specific regulations) and regarding the medical certificate (for the Aircrew Regulation and ATCO Regulation). These new definitions are applicable for both the licence and medical certificate issued in either electronic or physical format.

2.7.1.3. New EASA Forms for the personnel licences issued in electronic format

EASA will introduce three new EASA Forms for the personnel licences issued in electronic format (one for each domain within the scope of this RMT) which will be part of the already existing Appendices to each domain-specific regulation:

Aircrew: EASA Form 155 is the new format for a licence issued in electronic format; EASA Form 141 is the already existing form for a licence issued in physical format.

ATCO: EASA Form 156 is the new format for a licence issued in electronic format; EASA Form 152 is the already existing form for a licence issued in physical format.

Continuing airworthiness: EASA Form 206 is the new format for a licence issued in electronic format. EASA Form 26 is the already existing form for a licence issued in physical format.

To transpose the ICAO standard requiring the competent authority to only issue each licence in one of the two formats (physical or electronic), this NPA proposes to include in the Appendices of each domain-specific regulation (where both electronic and physical formats are included) a requirement that the competent authority shall issue a licence in only one of the two possible formats — physical or electronic.

2.7.1.4. EASA Forms for the licence issued in electronic format: differences v the ICAO Common Form

This NPA proposes to introduce the Common Form of the Electronic Personnel Licence as introduced in ICAO Annex 1, Appendix 4. However, it proposes that certain items in the EASA Forms (EASA Forms 155, 156 and 206) differ, for the reasons explained below:

a. Item IVa: Photograph of holder

ICAO Annex 1, Appendix 4 (Common Form of the Electronic Personnel Licence) requires in item IVa a photograph of the holder. This new requirement has no equivalent in ICAO Annex 1 for the traditional licence issued in physical format.

Therefore, within the EU MSs, the aircrew licences, the aircraft maintenance licences and the (student) ATCO licences issued in physical format do not contain a photograph of the holder. This means that issuing competent authorities lack this information in their licence systems. While adding a photograph to a licence issued in electronic format is technically feasible, it introduces certain challenges:

- (a) While a photograph aids in identifying the licence holder, many ICAO Contracting States do not view a licence as a valid identification document.
- (b) With the increasing digitalisation of issuing competent authorities, online procedures are common for licence applications. If a licence holder submits a photograph online, the competent authority cannot guarantee its accuracy or authenticity. Requiring in-person applications would be inconvenient for both competent authorities and licence holders.
- (c) Technically, the photograph must meet certain specifications (size, format), making it challenging for licence holders to ensure compliance.

With this NPA, the proposal is to not transpose this ICAO standard, and therefore not to include the photograph of the holder in aircrew licences, aircraft maintenance licences and (student) ATCO licences issued in electronic format.

b. Item V: Address of holder

ICAO Annex 1, Appendix 4 (Common Form of the Electronic Personnel Licence) requires in item V the address of the holder if desired by State. This requirement is equivalent to the one in ICAO Annex 1 for the traditional licence issued in physical format in Chapter 5.2.1, item V. In both formats, such information is optional.

Today, within the EU MSs, the address of the holder is required to be included in the aircraft maintenance licence by Appendix VI to Annex III (Part-66) to Commission Regulation (EU) No 1321/2014 and to be included in the aircrew licence by Appendix I to Annex VI (Part-ARA) to Commission Regulation (EU) No 1178/2011. The address of the holder of the (student) ATCO is optional in Appendix 1 to Annex II to Commission Regulation (EU) 2015/340.

With this NPA, the proposal is:

- (a) to remove the address of the holder of:
 - an aircraft maintenance licence issued in physical format;
 - a (student) ATCO licence issued in physical format, and
- (b) to make the address of the holder an optional piece of information for an aircrew licence issued in physical format.

The proposal under point (a) is based on assessment and evidence that the loss or theft of the holder's licence may result in undesired divulgation of private information, which could be used for ill-intentioned purposes. Additionally, applicants for an aircraft maintenance licence or changes to their licences are still required to provide an application form (EASA Form 19) which includes the address of the applicant (refer to Appendix V to Part-66). Therefore, the competent authority issuing licences will still collect and possess this information.

c. Item VII: Script signature of holder

ICAO Annex 1, Appendix 4 (Common Form of the Electronic Personnel Licence) requires in item VII the script signature of the holder. This requirement is equivalent to the one in ICAO Annex 1 for the traditional licence issued in physical format in Chapter 5.2.1, item VII.

The script signature of the licence holder has traditionally been added after the competent authority completes the licence issuance procedure. Typically, licences issued in physical format are delivered to holders by mail, allowing them to sign the licence in physical format upon receipt.

Introducing a requirement for competent authorities to verify the holder's script signature before issuing the licence in electronic format, especially in online procedures, seems impractical. Several issues arise, such as:

- (a) Scanned script signatures attached to online applications cannot be verified, making it challenging for competent authorities to ensure script signature authenticity.
- (b) In many countries, a scanned script signature lacks the automatic presumption of legal validity.
- (c) In some countries, requesting a signature before having the document may be illegal.

- (d) Electronic signatures are widely available, and their use is increasing.
- (e) Concatenated signing steps (authority, holder) may complicate the issuance of licences.

The electronic signature of the officer issuing the licence, as required in item X of ICAO Annex 1, Appendix 4 (Common Form of the Electronic Personnel Licence) secures and guarantees the authenticity and integrity of licence data, excluding the holder's script signature. According to ICAO Annex 1, Chapter 5.3.1.3, the electronic signature of the issuing officer is required to conform to recognised standards and have an appropriate level of security. In the European context, the recognised standard would be provided by Regulation (EU) No 910/2014¹² (eIDAS Regulation) and the appropriate level of security will be at least that of an advanced electronic signature.

Considering all the above, this NPA proposes to not transpose this ICAO standard for the aircrew licence and (student) ATCO licence issued in electronic format, which means that the script signature of the holder is not included in their licences.

In the case of aircraft maintenance licences issued in electronic format, the script signature of the licence holder can be used for comparison with the signature that the licence holder has affixed on maintenance release documents, including the EASA Form 1 for components and the aircraft certificate of release to service (CRS). This ensures traceability on the maintenance performed and the use of privileges granted with the issuance of an aircraft maintenance licence.

Today, this capability is already ensured by the presence of the holder's script signature on licences issued in physical format; hence the intention to maintain it for licences issued in electronic format.

Future evolutions on this matter will rely on the use, by all stakeholders, of electronic signatures for maintenance release documents.

With this NPA it is also proposed that the script signature of the holder of the (student) ATCO on their licence in physical format is not needed anymore, and to delete this requirement under item V of Appendix 1 to Annex II to Commission Regulation (EU) No 2015/340. This is done both to keep consistency between licences issued in electronic format and in physical format, but also because a script signature in a physical licence is not deemed necessary. With the added requirement for ATCOs to be able to show a photographic-ID when requested, the ID will contain the required features for identification of the individual. The licence itself is not suitable for this and therefore it is considered sufficient to be able to confirm that the personal data of the licence matches the ID, and the ID is then matched to the ATCO presenting the documents.

d. Item XI a: Seal or stamp of authority issuing the licence

ICAO Annex 1, Appendix 4 (Common Form of the Electronic Personnel Licence) requires in item XIa the seal or stamp of the authority issuing the licence.

The seal or stamp of the competent authority is deemed an additional security feature in licences issued in physical format, but it adds no extra functionality to licences in electronic format. The presence of such seal or stamp of the competent authority does not bring value for identifying the

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) (http://data.europa.eu/eli/reg/2014/910/oj).



competent authority issuing the licence and proving the authenticity of the licence issued in electronic format. The electronic signature of the officer issuing the licence already serves this purpose.

With this NPA, the proposal is to not transpose this ICAO standard, and therefore not to include the seal or stamp of the authority issuing the licence in the aircrew licence, aircraft maintenance licence and (student) ATCO licence issued in electronic format.

2.7.1.5 New authority requirements regarding the introduction of the licence issued in electronic format

New authority requirements in each domain-specific regulation are proposed to be added regarding the licences issued in electronic format and the establishment of an electronic personnel licence system (EPLSYS). These new authority requirements follow the structure of the requirements of Chapter 5 (Specifications for Personnel Licences) in ICAO Annex 1.

Because each domain-specific regulation has its own regulatory structure, this NPA proposes to have the same new requirements placed in the appropriate parts of each regulation.

These new authority requirements are to be found in:

- (a) Commission Regulation (EU) No 1178/2011 (aircrew): point ARA.FCL.130;
- (b) Commission Regulation (EU) 2015/340 (ATCO): point ATCO.AR.D.002;
- (c) Commission Regulation (EU) No 1321/2014 (continuing airworthiness): Appendix VI to Annex III (Part-66).

These requirements contain the following:

The competent authority having issued a licence in electronic format shall ensure that all other competent authorities are able to determine the licence, rating or certificate privileges and validity;

The authenticity, validity and content of a licence issued in electronic format 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.

In the context of issuing licences in electronic format, the competent authority shall establish procedures for the establishment and operation of an EPLSYS.

The EPLSYS shall ensure interoperability, security, confidentiality, data protection, authentication and accessibility of the licence issued in electronic format.

Personnel licences issued in electronic format shall:

- (a) be displayed on self-contained mobile electronic visual display devices;
- (b) replicate the information contained in the competent authority electronic personnel licence system records.

Technical specifications for the licence issued in electronic format

The issuance of licences in electronic format requires a supporting EPLSYS that allows the generation, display and verification of the licence. ICAO is developing the technical specifications of a generic EPLSYS, which are based on the ISO/IEC 18013-5:2021 International Standard (ISO 18013-5). Once finalised, they will be issued as ICAO Doc 10190 'EPL technical specifications for implementation and verification' (hereafter: ICAO Doc 10190).

This NPA proposes to introduce an AMC (EPLSYS AMC) to the applicable EU Regulations, in which ISO 18013-5 and ICAO Doc 10190 are referenced. An EPLSYS should be trustworthy and globally interoperable across licensing competent authorities, not only within the EU MSs but within all ICAO Contracting States. The EPLSYS should also ensure the security and accuracy of information by meeting the technical specifications for the establishment and operation of an EPLSYS. Additionally, it should safeguard the privacy of the licence holder.

Besides the above, the specifications for the implementation of an EPLSYS must provide flexibility to support competent authorities in the selection of architectures that best meet their needs. Most licensing competent authorities already make use of IT tools and applications to manage and issue the licences in physical format, i.e. a licence system (LICSYS) based on different architectures and technological solutions. Consequently, the EPLSYS specifications must allow the EPLSYS to be independent from any specific architecture or technical solution, making its implementation possible in the context of any existing LICSYS.

The proposed EPLSYS AMC is the same for aircrew licences, (student) ATCO licences and aircraft maintenance licences issued in electronic format.

As each domain-specific regulation has its own regulatory structure, this NPA proposes to have such AMC placed in different parts of the regulations. This AMC is linked to the following requirements:

- Commission Regulation (EU) No 1178/2011 (aircrew): point ARA.FCL.130; (a)
- (b) Commission Regulation (EU) 2015/340 (ATCO): point ATCO.AR.D.002;
- (c) Commission Regulation (EU) No 1321/2014 (continuing airworthiness): Appendix VI to Annex III (Part-66).

The technical specifications included in the proposed EPLSYS AMC are aligned with the draft ICAO Doc 10190. However, in some cases this AMC introduces certain differences when a slightly different solution is considered to have benefits. These cases are clearly identified in this AMC; for example, the namespace has been changed from 'int.icao.epl...' to 'int.easa.epl...' to identify the namespaces that are not in line with the draft ICAO Doc 10190. EASA is working with ICAO to achieve full alignment between the two documents before they become applicable.

Finally, licences in electronic format will be subject to verification by inspectors from verifying competent authorities other than the issuing competent authority, so inspectors not affiliated with the issuing competent authority must be able to securely access and authenticate the licence in electronic format. According to ICAO Annex 1, ICAO Contracting States can decide whether to implement an EPLSYS or not, but they are obliged to accept licences issued in electronic format issued by other States. At the same time, if a State decides to implement an EPLSYS, it will have to be implemented in such a manner that it provides all the necessary means for other States to verify its licences issued in electronic format.

2.7.1.7 Transitional measures regarding the inclusion of the information of the medical certificate in licences issued in electronic format (pilot licence and (student) ATCO licence only)

Section 5.3.6. of ICAO Annex 1 states that the electronic personnel licence 'shall include, when applicable, the current medical assessment with class, expiry date, and any medical limitations deemed relevant by the Licencing Authority'.

Today, in the EU system the licence and the medical certificate are two separate types of documents with significantly different processes and IT systems. Being mindful of the complexity associated with the migration to an integrated system, the NPA proposes that competent authorities be allowed a transition period of up to 10 years from the date of entry into force of this Regulation to include the medical information in the licence issued in electronic format. During such transition period, the medical certificate may remain in physical format in accordance with Part-MED and Part ATCO.MED.

A new Subtask 2 of RMT.0737 is considered by EASA in order to introduce the medical certificate issued in electronic format into the licence issued in electronic format well in time before the end of the transition period of 10 years.

2.7.2. Specific proposed amendments to the existing requirements of Commission Regulation (EU) 1178/2011 (aircrew)

 Point ARA.FCL.200 Procedure for issue, revalidation or renewal of a licence, rating or certificate

These requirements were originally written for the licence issued in physical format. This NPA proposes different requirements for the licence issued in electronic format, as follows:

New points (d), (e), (g) and (h)

In the context of licences issued in electronic format, interactions between the parties involved should be fully digital and paper processes should be largely eliminated. Processes should be faster and must not be slower than today's processes. Digital communication channels should be created and utilised. Communication and data transfer should take place in real time wherever possible. Access rights for the corresponding IT systems must therefore be specifically defined and regulated for each use case (such as revalidation / renewal and the corresponding transmission of documentation).

To make communication and data transfer possible in real time, the new requirements state that competent authorities shall develop appropriate procedures to grant examiners or evidence-based training (EBT) managers access to the licensing system of the pilot's competent authority for the revalidation and renewal of a rating or certificate on a licence issued in electronic format (point (d)) and issuance of an additional rating or certificate on a licence issued in electronic format (point (e)). The competent authorities shall also develop appropriate procedures to grant authorised personnel access to the licensing system of the pilot's competent authority to enter the new validity date of the SEP or TMG class rating (point (g)) and the SE piston or turbine helicopter type rating (point (h)).

b. Addition of the new point ARA.FCL.221 Procedure for the update of a pilot licence issued in electronic format

Point ARA.FCL.220 defines the requirements regarding the procedure for the re-issue of a pilot licence. These requirements were originally written for the licence issued in physical format.

To make clear that the procedure for the licence issued in electronic format is different, this NPA proposes to introduce the new point ARA.FCL.221.

In conjunction with point ARA.FCL.220, this new point ensures that suitable update procedures apply for licences in electronic format.

2.7.3. Specific proposed amendments to existing requirements of Commission Regulation (EU) 2015/340 (ATCO)

a. Adaptation of the licence definition

According to its definition, licence is a document issued and endorsed in accordance with the provisions of Commission Regulation (EU) 2015/340. However, with the adoption of the licence issued in electronic format, the current definition was adapted to suit both formats.

b. Addition of a requirement to carry a personal identification document (new point ATCO.A.015A)

Today holders of pilot licences or aircraft maintenance licences are required to carry a personal identification document while exercising the privileges of their licence. For the (student) ATCO there has been no such requirement. This means that an inspector is not able to confirm that the individual that presents a licence is in fact the holder of said licence.

To streamline the domains and to rectify this issue, a new provision has been added which requires (student) ATCOs to carry the licence, the medical certificate and a personal identification document, while they exercise the privileges of the licence. This provision is based on point FCL.045 of Commission Regulation (EU) No 1178/2011 (aircrew) and written to be as aligned as much as possible with the other domains.

c. Amendment to point ATCO.A.020 Revocation and suspension of licences, ratings and endorsements

The text was amended to reflect that for all licences (issued in either physical or electronic format) the procedures established for revocation are provided in ATCO.AR.D.005, and the other requirements are only applicable to the licences issued in physical format.

d. Amendment to point ATCO.AR.D.001 *Procedure for the issue, revalidation and renewal of licences, ratings, endorsements and authorisations*

These requirements were originally written for licence issued in physical format; the amendment clarifies that only one licence format may be used (physical or electronic).

Furthermore, the new AMC2 ATCO.AR.D.001(a)(2) is added to facilitate the use of a temporary procedure, allowing a controller to exercise a unit endorsement once it has been revalidated or renewed, but before the electronic licence has been updated.

e. Addition of the new point ATCO.AR.D.002 *Licence issued in electronic format and establishment of an electronic personnel licence system*

This new point regulates the establishment of an electronic personnel licence system, which includes requirements on the issuance of a licence issued in electronic format as well as the ability to validate such a licence issued in electronic format.

Requirements on system access for other entities

The proposed amendments to Commission Regulation (EU) No 1178/2011 (aircrew) in points ARA.FCL.130 (i) - (j) and to Commission Regulation (EU) No 1321/2014 (continuing airworthiness) in point 66.B.25 contain requirements for granting access to the licensing system for several entities; for example, training organisations, examiners or other authorities. These requirements are not included in the ATCO Regulation. While holders of a pilot licence or an aircraft maintenance licence are highly mobile, this is not the case for ATCOs, and an ATCO wishing to obtain a unit endorsement in a new MS must change the competent authority of their licence. This means that a licence interaction between, for example, an examiner and a licence holder holding licences from different competent authorities is extremely rare.

Adding requirements on data access increases the work required to implement an electronic personnel licence system (EPLSYS) for ATCO licences issued in electronic format, and as these requirements are not considered essential, they are not replicated in the ATCO Regulation. Should a competent authority wish to establish access for, for example, training organisations or air navigation service providers (ANSPs), they may still do so.

Provisions to allow temporary exercise of the privileges before the licence issued in electronic format can be updated

AMC1 ATCO.AR.D.001(a) allows the competent authority to develop a procedure to enable a licence holder to exercise the privileges of the licence before the licence has been issued. The proposed amendments include an additional AMC (AMC1 ATCO.AR.D.001(a)(2)) to allow a similar provision to apply when a licence issued in electronic format is used and a unit endorsement is issued, renewed or revalidated. This is to allow the controller to exercise the privileges of the unit endorsement after the controller has completed the last assessment but before the authority has updated the licence issued in electronic format.

This is required as an assessor revalidating or renewing a unit endorsement can no longer enter the new endorsement into the licence, creating a lag between the assessor completing the assessment and the competent authority being able to update the licence issued in electronic format. Therefore, competent authorities are given the option to develop a procedure which would allow the ATCO to exercise the privileges of the unit endorsement, pending the update of the licence issued in electronic format.

Removing the option for additional variable field XIV from the ATCO licence format(s) g.

In fields XIII and XIV of the licence format for the (student) ATCO issued in electronic format there is an option to enter 'additional licensing information'. The rulemaking group did not identify any need for such 'additional information'.

Today, field XIV is sometimes used to enter the date of birth. This information is available on the application form for the issue, revalidation or renewal within the competent authority, but there is no requirement to insert this in the licence.

Since there has been no identified need for its use, it is proposed to remove field XIV. Field XIII can still be used by the competent authority for additional input necessary for the (student) ATCOs, e.g. radiotelephony certificate, etc. A removal would reduce the information that is printed on the licence

and produce a more uniform licence format throughout the MSs. It would also reduce administrative complexity.

Field XIV is listed as 'reserved', to highlight that this data field will be empty. The intention is that this field shall not be displayed on the licence issued in electronic format; it will only be existing in the database in the event that a foreign (non-EU) licence issued in electronic format is audited and provides data for this field.

h. Moving the language proficiency endorsement in the licence format(s) for the (student) ATCO licence

In the (student) ATCO licence the language proficiency endorsement is listed in field XIII, while all other endorsements are listed in item XIIb. In the pilot licence, language proficiency endorsements are listed in field XIII.

In February 2023 the EASA Committee, when discussing EASA Opinion No 06/2022 (the result of which was Commission Regulation (EU) 2023/893), proposed to change the location of language proficiency endorsement from item XIII to item XIIb. The decision taken was that this change will be proposed in the context of the rulemaking activities for electronic personnel licences. In line with the above, it is proposed to move the language proficiency endorsement from field XIII to field XIIb, in both the licence issued in physical format and licence issued in electronic format. There are no changes to the endorsement itself or how this is presented in the licence; the information is simply moved from one field to another.

2.7.4. Specific proposed amendments to existing requirements of Part-66 (Annex III to Commission Regulation (EU) No 1321/2014 (continuing airworthiness))

a. Point 66.A.10

Point 66.A.10 is proposed to be amended to clarify the actions to be taken depending on what the application is made for (i.e. issuance of a new licence, change to a licence or validity renewal of a licence issued in physical format).

The proposed requirements also refer only to Appendix V as regards the information which needs to be provided by the applicant (including EASA Form 19).

Additionally, the provision allowing maintenance organisations (approved in accordance with Part-145 or Part-CAO) to provide application documentation on behalf of the applicant is proposed to be moved from point 66.A.40(b) and extended to all types of applications.

b. Points 66.A.40 and 66.B.120

Point 66.B.120 are proposed to be amended to apply only to licences issued in physical format.

As set out in point 66.A.40(a), the current process to renew the validity of aircraft maintenance licences aims at verifying, every 5 years, that the records of the competent authority correspond to what is written on the licence. This is to ensure that the licence holder does not use a licence containing information that was not added by the competent authority.

However, the licences issued in electronic format, when updated by the holder, reflect the records of the competent authority (as part of its licensing system).

The information included in those records is supposed to be always accessible to the competent authority and that it cannot be manipulated by an external entity without the authority being aware or having granted an authorisation.

Therefore, the validity of licences issued in electronic format cannot not expire based on the reason currently laid down in point 66.A.40(a).

Additionally, point 66.A.40 is proposed to be amended for clarity purposes (with point (c)(2) proposed to be amended to reflect the specificity of licences issued in electronic format but still applying to licences issued in physical format).

AMC1 66.A.40(c) is proposed to be added to complement point (c) and advise the holder on how to ensure that the content of the licence is correct and that they have signed their licence or the script signature inserted is correct.

c. Point 66.A.55

Point 66.A.55(a)(2) is proposed to be added to reflect a requirement already set out in Section VIII of the aircraft maintenance licence in physical format (i.e. in EASA Form 26: 'This licence shall be signed by the holder and be accompanied by an identity document containing a photograph of the licence holder.').

Point 66.A.55(b) is proposed to be added to require the licence holder to report the loss of his or her licence in physical format or of the device on which his or her licence was issued in electronic format.

Point 66.A.55(c) is proposed to be added to ensure that aircraft maintenance licence holders whose licence in physical format has been limited, suspended, or revoked return their licence to the competent authority that issued the licence.

Point 8 of Appendix VI to Part-66 is proposed to be moved to the new point 66.A.55(d) to concentrate the requirements addressed to licence holders under Section A of Part-66.

d. Point 66.B.105

Today, pursuant to point 66.B.105(a)(i) of Annex III (Part-66) to Regulation (EU) No 1321/2014, a maintenance organisation approved in accordance with Annex II (Part-145) or Annex Vd (Part-CAO) may prepare aircraft maintenance licences on behalf of the competent authority when the competent authority has authorised the organisation to do so.

The licence prepared is then to be provided to the competent authority for issuance to the applicant as specified in point 66.B.105(c).

With this NPA, point 66.B.105 is proposed to be entirely deleted since:

 Point 66.B.105(a)(i) is proposed to be deleted, and, therefore, the possibility for maintenance organisations to prepare aircraft maintenance licences is withdrawn from the Regulation.

This proposal is due to the introduction of licences issued in electronic format, whose nature will trigger new concerns if such provision remains.

If maintenance organisations were authorised to prepare licences in electronic format, it would require them to access the issuing authority's server to enter information relevant to the applicant.

In such cases, giving access in writing to maintenance organisations could create information security risks (e.g. leakage of information, potential system vulnerabilities, others).

For consistency purposes, this possibility is also proposed to be removed for licences issued in physical format.

Additionally, EASA has requested and received feedback from the MSs (through the RMG and through meetings with the Advisory Bodies) on whether this provision was used in their national context.

All replying competent authorities indicated that they do not use this provision, hence have not given authorisation to maintenance organisations to prepare licences on their behalf.

This information leads to believing that there should be no to low impact on maintenance organisations, pending the comments that will be received during the consultation.

 Point 66.B.105(a)(ii) is proposed to be deleted, and, therefore, the explicit statement that maintenance organisations approved in accordance with Annex II (Part-145) or Annex Vd (Part-CAO) may issue recommendations on licence-related applications.

This proposal is due to the fact that Part-66 does not require any action from the competent authority when such recommendations are received, and thus does not ensure that the associated applications will be processed faster or in a different manner.

Additionally, it has been observed with a few competent authorities that this provision is not used and that application documentation remains thoroughly reviewed even when a recommendation was issued by a maintenance organisation.

Therefore, this provision is deemed ineffective and limited, and its deletion is proposed for simplification purposes with seemingly no to low impact, pending the comments that will be received during the consultation.

All related provisions are proposed to be deleted from Appendix V to Part-66 (EASA Form 19), Appendix VI to Part-66 (points 6 and 7), Part-145, Part-CAO, as well as AMC 66.B.105.

e. Points 66.B.110(a), 66.B.115(a) and 66.B.120(a)

Points 66.B.110(a), 66.B.115(a) and 66.B.120(a) are proposed to be amended for clarity purposes and to remove the notion of 'issuance of the licence' where applicable when the intended meaning is rather:

- the production of a new licence in physical format with updated information to replace an existing licence; or
- the amendment of a licence in electronic format with updated information.

The reason is that the word 'reissue' might be confused with the meaning intended in point 66.B.100 which is to render a new licence valid (with a new licence holder number, as referred to in point 1.4 of Appendix VI to Part-66) after the applicant has met the applicable requirements and provided his or her application in accordance with Appendix V to Part-66.

f. Point 66.B.500

Point 66.B.500(a)(9) is proposed to be added to require authorities to act upon licences whose content has not been issued or amended by them (in such case, the wording remains generic and includes licences issued in electronic format, should they also be subject to such risks).

This new proposed point is combined with the new proposed point 66.A.55(d) (moved from point 8 of Appendix VI to Part-66).

Point 66.B.500(b) is proposed to be added, along with the associated AMC, to require competent authorities to establish and implement a procedure for the revocation, suspension or limitation of valid aircraft maintenance licences issued in electronic format.

Point 66.B.500(c) is proposed to be added to require actions from the competent authority once the licence holder has reported the loss or theft of their current licence issued in physical format or of the self-contained mobile electronic visual display device on which their licence was issued.

Those amendments will mitigate the risk of someone using a licence while it has been stolen, limited, suspended, or revoked.

This new proposed point is combined with the new proposed point 66.A.55(b).

g. Appendix V to Part-66

Appendix V to Part-66 is proposed to be amended as follows:

- Point (a) of Appendix V is proposed to clearly account for any application format and thus not restrict EASA Form 19 to physical documentation.
 - Part of the current content of point 66.A.10(a) is also proposed to be moved to point (a) of Appendix V.
- The requirement to provide supporting documentation with any application is proposed to be moved from point 66.A.10 to point (b) of Appendix V.
- EASA Form 19 is proposed to be amended for wording improvement and to account for licences issued in electronic format, including a new field for the signature of the applicant, allowing the signature to be reused for the issuance of the licence (in Section VII of EASA Form 206).

AMC1 Appendix V to Part-66 is proposed to be added to list some of the possibilities regarding the means that an applicant can use to send an application related to the aircraft maintenance licence.

AMC1 Point 3.3 of Appendix VI to Part-66 is proposed to be added to completement Appendix V regarding how the competent authority should acquire the script signature of the applicant before issuing a licence in electronic format.

h. Points 2, 3, 5, 11 and 14 of Appendix VI to Part-66

Points 2, 3, 5, 11 and 14 of Appendix VI are proposed to be amended or deleted to reflect that aircraft maintenance licences issued in physical format may not be issued only on paper but also using other suitable material such as plastic cards (refer to the definition added with point (v) of Article 2) and to remove obsolete provisions.

The proposed amendments aim to keep the same intent but make the wording more generic to account for all possibilities.

Where relevant, the previous requirements, worded as possible actions for competent authorities, are proposed to be changed into acceptable means of compliance (AMC).

i. Information on the 'place of birth' in EASA Form 26 in Appendix VI to Part-66

Today, the information on the place of birth of the holder is required to be included in the aircraft maintenance licence by Appendix VI to Annex III (Part-66) to Regulation (EU) No 1321/2014.

This is an additional requirement to those of point 5.2.1 of ICAO Annex 1 on personnel licensing.

With this NPA, the place of birth of the holder is proposed to be removed from aircraft maintenance licences that will be issued in either physical or electronic format.

This proposal is due to the introduction of licences issued in electronic format, whose mandatory content will be based on the provisions of ICAO Annex 1, Appendix 4 (Common Form of the Electronic Personnel Licence).

The ICAO Common Form does not include a field for the place of birth of the licence holder, therefore, maintaining this information in licences in electronic format would require the addition of a new data field and set.

Such addition would cause compatibility issues when third-country reading devices and applications, pre-programmed for the number of data fields given by ICAO, would not be able to read aircraft maintenance licences issued by MSs.

Moreover, the reading devices of each MS would require a different set-up depending on whether they would be used for the inspection of aircraft maintenance licences or other types of licences which do not contain the place of birth of the holder (e.g. ATCO licences, flight crew licences).

For consistency purposes, the removal of the place of birth from licences in electronic format is also proposed to be applied to licences in physical format.

Nevertheless, knowing the place of birth of the licence holder might be useful for the competent authority to identify them in specific situations. This information will still be collected by the competent authority at the time of application for a licence, changes to it, or validity renewal for licences in physical format (through EASA Form 19, refer to Appendix V to Part-66).

As regards the proposal to delete the address of the holder from aircraft maintenance licences, please refer to point b. of Section 2.7.1.4.

What are the expected benefits and drawbacks of the proposed 3. regulatory material

Before the publication of ToR RMT.0737, an impact assessment (IA) was performed to define the best regulatory approach to address the issues defined in Section 2.2. The results of this IA were presented and discussed with the Advisory Bodies (MAB and SAB) in May-June 2022. Based on the feedback provided, EASA concluded that the MSs are supportive of RMT.0737 with the objectives and the scope presented in Sections 2.6 and 2.7 respectively.

This IA was performed using the experience gained in developing the dLAP¹³ project, cost-benefit analysis conducted to assess the initial and recurrent costs for building an IT platform for implementation of the EPL, and feedback from the Advisory Bodies.

Below is an extract of the regulatory options which were considered and analysed. A full overview of all analysed options and their assessment is presented in Appendix 1.

Table 1: Analysed options

No	Title	Description
Option 0	No regulatory change	MSs continue issuing only paper version of licences. Issues remain at stake.
Option 1	Transposition of ICAO Annex 1 EPL into three personnel licence domains (pilot licence, Part-66 licence) and establishment of common standards for EPL implementation.	In RMT.0737 EASA develops: a. a definition for a common single EU EPL, based on the proposed ICAO Annex 1 amendments; b. common standards for the security, confidentiality, integrity, authentication, accessibility of an EPL and common standards for the EPL to enable the functions of EPL issuance and oversight. Regulating a common approach to the EPL in line with ICAO Annex 1 across the three affected domains and applying common principles to ensure confidentiality, integrity, authentication, accessibility and security of the licences. The EPL will be optional (supplementary to the paper pilot licence),, and the MSs could decide whether to apply the EPL or not. MSs under their own sovereignty develop and manage an IT EPL tool / infrastructure which would allow and ensure: a. issuance/amendment of an EPL format (e.g. via e-signature, seal, etc); b. display in an electronic format (via QR code, available on a mobile device); c. verification of the confidentially, integrity, authenticity, availability and non-repudiation of an EPL. The requirements which the MSs need to comply with when developing such IT system would be part of RMT.0737.

In 2017, EASA initiated a project to digitalisation of pilot licences by launching a partnership Proof of Concept between EASA and six national competent authorities (NCAs) for digital Licences for EU Aviation Pilots (dLAP).



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Under this option, <u>EASA will not intervene</u> at the level of development
and implementation of the IT system.

The benefits and drawbacks of these options are presented in the table below.

Table 2: Summary of the benefits and costs of the analysed options

Criteria	Option 0 No regulatory change	Option 1 Transposition of ICAO Annex 1 EPL into the three affected domains and introduction of common standards for EPL implementation	
Safety	No impact	Enhance safety as potential fraud can be minimised, and changes to the electronic personnel licences can be reflected in a timelier manner.	
Social	No impact	No impact	
Environmental	No impact	Overall positive impact due to the move from a paper to electronic document. No quantitative assessment is performed.	
Economic	Lack of digital interaction between licensing authority and EPL holders, leading to inefficiencies	 Flexibility for the MSs to decide, based on their budget, resources, maturity and interest in the digitalisation, the pace of development/ implementation of an IT EPL system, as the implementation of the EPL is optional. Furthermore, the impact can vary depending on the size and complexity of the aeronautical community that will be affected in the MS. The MSs have full autonomy to decide whether they will implement the EPL to all personnel, to a certain group (e.g. private pilot, commercial pilot, airline transport pilot, etc.) or to individual applicants. Enhanced efficiency by reducing the overall time required to issue a licence and by providing real-time authenticity verification. The common standards for the IT system for EPL implementation would ensure interoperability of the EPL. Facilitate standardisation and uniform presentation of the EPL across MSs due to the common standards applicable to all MSs. For EASA — one single RMT to introduce the EPL, instead of three individual tasks. One RMT would ensure a holistic and coordinated approach in developing changes for all domains in a coordinated and structured way. Risks related to the divergence in transposing ICAO Annex 1 amendments to the EPL would be minimised. Potential economy of scale for the NCAs to commission an IT EPL tool for the EPL (e.g. price of the seal, the qualified or advanced signatures). By transposing the ICAO SARPs and its guidance, ramp inspectors would be faced with fewer differences between personnel licences issued in electronic format, which facilitates quick verification of personnel holding a valid licence for the type of aircraft they operate during ramp inspections performed on either MS carriers or third-party carriers. 	

Disadvantages:

 The verification mechanism for electronic personnel licences will have minimal impact. MSs will need an electronic device if they wish to use electronic authenticity verification systems for an electronic personnel licence; otherwise, they will be able to use traditional means of verification.

Note: The costs for the development of the EPL IT system and its deployment depend on how the MS envisages to implement the EPL. Therefore, an assessment of such costs could not be provided.

Based on the above, it is concluded that the best regulatory option for RMT.0737 is Option 1 (introduction of the EPL across several domains (aircrew, ATCO, Part-66 maintenance) and development of common standards for security, authentication, accessibility and interoperability of an electronic pilot licence) to ensure a standardised approach to the issuance and oversight of the EPL. The implementation of the EPL is left to the MSs to develop an IT tool for the EPL (based on their interest/budget, etc), respecting the EU standards, subject to RMT.0737. This proposal is aimed at introducing the EPL in a harmonised way to ensure total system approach. EASA's role as a regulator will involve setting robust (technical) requirements, through RMT.0737, for EPL display and verification, while allowing market providers to develop IT solutions in accordance with common (technical) standards.

4. Proposed regulatory material

Please refer to:

- NPA 2024-08 (B) 'Proposed amendments to Commission Regulation (EU) No 1178/2011' (aircrew)
- NPA 2024-08 (C) 'Proposed amendments to Commission Regulation (EU) 2015/340' (air traffic controllers' licences and certificates)
- NPA 2024-08 (D) 'Proposed amendments to Commission Regulation (EU) No 1321/2014' (continuing airworthiness)
- NPA 2024-08 (E) 'Proposed amendments to Commission Regulation (EU) 2018/1976' (sailplanes)
- NPA 2024-08 (F) 'Proposed amendments to Commission Regulation (EU) 2018/395' (balloons)

5. Monitoring and evaluation

EASA will monitor the proposed regulatory material by following closely how many EU MSs have decided to deploy personnel licences issued in electronic format in the three affected domains, and what issues they face during and after the implementation. Furthermore, EASA will monitor through the RAMP inspections how EU MSs validate personnel licences issued in electronic format from third countries and what questions/issues they may face. As the information of such monitoring is mainly of qualitative nature, no monitoring indicators are proposed at this stage. Feedback from the implementation, as well as questions/issues, will be captured and discussed at regular meetings with Advisory Bodies, RAMP meetings, etc.

The decision whether an evaluation will be necessary will be taken based also on the monitoring results.

6. Proposed actions to support implementation

EASA intends to provide focused communications for Advisory Body (AB) meetings (Technical Bodies (TeBs) and Technical Committees (TECs)), after the amending Regulations and the associated AMC and GM are published.

7. References

- State letter AN 12/1.1.25-20/112, 23 December 2020, Proposals for the amendment of Annex 1 regarding implementing an electronic personnel licensing system with the objective to improving efficiency
- ICAO Annex I Personnel licensing
- ICAO Doc 9303 Machine Readable Travel Documents
- ICAO Doc 9379 Manual of procedures for establishment and management of a State's personnel licensing system
- ICAO Doc 10190 EPL technical specifications for implementation and verification

Appendix 1 — Details on the impact assessment

Before starting the RMT, an impact assessment was performed to identify different options for implementation of the personnel licences in electronic format. The assessment provides answers to two questions:

- How could the personnel licences in electronic format be developed/implemented, considering 1. the experience gained during the dLAP project¹⁴?
- What are the benefits and drawbacks of extending the scope of RMT.0737, initially planned only 2. for pilot licences to personnel licences in other domains (ATCO, maintenance)?

This is an overview of all analysed options for regulating personnel licences in electronic format following the total system approach, providing answers to these questions.

The current analysis studied options for implementation of personnel licences in electronic format, considering various perspectives (compliance with the Basic Regulation and EASA remit, technical and legal/procurement aspects, political will, etc.). These aspects, especially on legal compliance with the Basic Regulation, are deemed essential for decision-making. Therefore, the initial analysis uses these criteria to filter options which are eligible for further analysis.

1. Overview of the analysed options

Option 0 is the baseline scenario. It is the 'do nothing' option which implies no change to the regulatory framework.

Option 1.1 proposes the introduction of EU personnel licences in electronic format in the EU regulatory framework. EU MSs develop and manage IT tool(s) for EPL implementation.

Option 1.2 envisages the introduction of EU pilot licences in electronic format in the EU regulatory framework and the development of common requirements for the security of pilot licences in electronic format. EU MSs develop and manage IT tool(s) for EPL implementation.

Option 1.3 proposes the transposition of ICAO Annex 1 SARPs into the EU regulatory framework (without common requirements for the security of personnel licences in electronic format).

Option 1.4 proposes the transposition of ICAO Annex 1 SARPs into the EU regulatory framework. EASA develops and manages one mandatory system for all EU MSs ('one EU system for all')

Option 1.5 proposes the development and management of an IT electronic personnel licence system by EASA, and EU MSs are invited to join the system on a voluntary basis.

In 2017, EASA initiated a project on the digitalisation of pilot licences by launching a partnership Proof of Concept between EASA and six NCAs for digital Licences for EU Aviation Pilots (dLAP).



2. Assessment of the options¹⁵

Table 1: Options for the development and implementation of an electronic pilot licence

Option	Title	Description	Means of implementation	Advantages	Disadvantages	Retained
Option 0	No regulatory change	MS continue issuing only paper version of the EPL. Issues remain at stake.		-	Lack of digital interaction between licensing authority and EPL holders, leading to inefficiencies	<u>No</u>
Option 1.1	Transposition of ICAO Annex 1 EPL into three personnel licence domains (pilot licence, Part-66 licence, ATCO licence) and establishment of common standards for EPL implementation	In RMT.0737 EASA develops: a. a definition for a common single EU EPL, based on the proposed ICAO Annex 1 amendments; b. common standards for the security, confidentiality, integrity, authentication, accessibility of an EPL and common standards for the EPL to enable the functions of EPL issuance and oversight. Regulating a common approach to the EPL in line with ICAO Annex 1 across the three affected domains and applying common principles to ensure confidentiality, integrity, authentication, accessibility and security of the licences. The EPL will be optional, and the MSs could decide whether to apply the EPL or not. MSs under their own sovereignty develop and manage an IT EPL tool / infrastructure which would allow and ensure: a. issuance/amendment of an EPL format (e.g. via e-signature, seal, etc.); b. display in an electronic format (via QR	Amendment to Commission Regulation (EU) No 1178/2011 (aircrew); Commission Regulation (EU) 2015/340 (air traffic controllers' licences and certificates); Commission Regulation (EU) No 1321/2014 (continuing airworthiness); Commission Regulation (EU) 2018/1976 (sailplanes); Commission Regulation (EU)	 Flexibility for the MSs to decide, based on their budget, resources, maturity, and interest in the digitalisation the pace of the development / implementation of an IT EPL system, as the implementation of the EPL is optional. Furthermore, the impact can vary depending on the size and complexity of the aeronautical community that will be affected in the MS. The MSs have full autonomy to decide whether they will implement the EPL to all personnel, to a certain group (e.g. private pilot, commercial pilot, airline transport pilot, etc.) or to individual applicants. Enhanced efficiency by reducing the overall time required to issue a licence and by providing real-time 	The verification mechanism for electronic personnel licences will have minimal impact. MSs will need an electronic device if they wish to use electronic authenticity verification systems for an electronic personnel licence; otherwise, they will be able to use traditional means of verification. Note: The costs for the development of the EPL IT system and its deployment depend on the how an MS envisages the EPL implementation. Therefore, an assessment of such costs could not be	Yes, due to the positive impact and limited adverse effects
		code, available on a mobile device);	2018/395	real-time authenticity verification.	provided.	

For the assessment, the abbreviation EPL (electronic personnel licence) is used which is the same as the use of the term 'personnel licence issued in electronic format' throughout the NPA.



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Option Title	Description	Means of implementation		Advantages	Disadvantages	Retained
	c. verification of the confidentially, integrity, authenticity, availability and non-repudiation of an EPL. The requirements which the MSs need to comply with when developing such IT system would be part of RMT.0737. The EPL will be optional (supplementary to the paper pilot licence) and the MS could decide whether to apply the EPL or not. Under this option, EASA will not intervene at the level of development and implementation of the IT system.	(balloons), and to the associated AMC and GM to support the application of those Regulations.	•	The common standards for the IT system for EPL implementation would ensure interoperability of the EPL. Facilitate standardisation and uniform presentation of the EPL across MSs due to the common standards applicable to all MSs. For EASA — one single RMT to introduce the EPL, instead of three individual tasks. One RMT would ensure a holistic and coordinated approach in developing changes for all domains in a coordinated and structured way. Risks related to the divergence in transposing ICAO Annex 1 amendments to the EPL would be minimised. Failing to integrate the other domains within the RMT.0737 may result in additional resources at a later stage for EASA to transpose ICAO Annex 1 amendments into the relevant domains. Potential economy of scale for the NCAs to commission an IT EPL tool for the EPL (e.g. price of the seal, the qualified or advanced signatures). No dependency on REPIF timelines and quick implementation possible by MS		

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Option	Title	Description	Means of implementation		Advantages	Disadvantages	Retained
				•	Full compliance with the current Basic Regulation.		
Option 1.2	Introduction of EU electronic pilot licences in the EU regulatory framework and development of common requirements for the security of pilot licences in electronic format. MSs develop and manage IT tool(s) for EPL implementation	Same as for Option 1.1 but limited only to pilot licences.	Amendment to the Aircrew Regulation and the associated AMC and GM		benefits as above but limited for pilot licences.	There is still the necessity to transpose ICAO Annex 1 standards to the other domains: maintenance licences and ATCO licences. It is not worth initiating a RMT only for one domain, whereas there are others also affected and for which transposition of the ICAO standards is still necessary. Disproportionate one-off costs for the MSs	No, due to the limited benefits compared to Option 1.1
						depending on the population of affected personnel licences	
Option 1.3	Transposition of ICAO Annex 1 EPL into the EU regulatory framework (without common requirements for security of personnel	In RMT.0737 EASA develops a regulatory framework on a common and unique EU EPL format (based on the ICAO Annex 1 EPL format). Apart from the pure transposition of the ICAO standards, this option envisages that the MSs would be left to decide themselves how to implement the EPL in their national context. Therefore, the option would open the	Changes in the Aircrew Regulation, the ATCO Regulation and the Continuing airworthiness Regulation and the associated	the cha	esources from EASA to develop nges in the Aircrew Regulation 1178/2011.	Proliferation of different tools/divergence which may have an adverse effect on the standardisation of the EPL. Very high risk/lack of interoperability between	No , due to the drawbacks
	licences in electronic format)	possibility for a variety of solutions for EPL implementation which could hamper the	AMC and GM			the IT systems for EPL implementation	



Option	Title	Description	Means of implementation	Advantages	Disadvantages	Retained
		standardised and uniform administration of the EPL by the MSs and cause interoperability issues.	Implementation			
Option 1.4	Transposition of ICAO Annex 1 SARPs into the EU regulatory framework. EASA develops and manages one mandatory system for all MSs ('one EU-system for all')	In this option, in addition to the transposition of the forthcoming ICAO Annex 1 changes, EASA would develop and manage (procured to a third party) an IT EPL tool which enables an electronic format of the EPL as a single system for all MSs. This tool will be unique and central for all MSs. The NCAs would need to integrate this tool into their licensing system to ensure interoperability. It would be possible for MSs to continue issuing a paper licence and/or an EPL. If a MS decides to issue an EPL, this would be possible only through the central single system, established and managed by EASA. The EPL will be supplementary to the paper pilot licence. In this option, EASA will take the responsibility for: • the issuance of the EPL according to the EU EPL format; • guaranteeing authenticity and security of all EPLs which will be issued via the EU single IT system. EASA will provide a unique EU EPL verification system (QR code) and consequently the issuance/verification of an EPL. • maintaining the authenticity of the EPL and taking any responsibility in case of fraud in the EPL, malfunction	Changes in the Basic Regulation (TBC with MS/EC) to give mandate to EASA to develop/ manage an IT EPL system. Standards for the IT system for managing the EPL and further clarify responsibilities for EASA to manage the system, access of third parties, etc.	1 IT tool instead of several which will save resources in development/maintenance and might be easily interoperable with other systems. In financial terms, the costs for development of the REPIF could be lower comparing to other options: One-off cost ca 740 K EUR Recurrent costs ca 132 K EUR/year. Facilitate standardisation and uniform presentation of the EPL across MSs (however this benefit is relevant also for other options.)	No remit from the Basic Regulation for EASA to perform the assigned task. Unclear interest from all MSs to give a mandate to EASA for such task. No earmark funds yet to develop/host the IT tool. High liability and reputational risk if the information in EU IT EPL system is not updated/secure, etc. Limited internal competency in developing/hosting such tool. Reliance on the REPIF could delay the EPL project and delivered solution for the MS	No due to the shortcomings explained

Option	Title	Description	Means of	Advantages	Disadvantages	Retained
•		•	implementation	ū	-	
		of an IT system, hampering the				
		completeness/correctness when				
		displaying the EPL, etc.				
		It is not in the remit of EASA (Articles 62, 72				
		and 75 of the Basic Regulation) to perform				
		such a task.				
		Such a responsibility may be granted to EASA				
		either:				
		 through an amendment to the Basic 				
		Regulation (subject to discussion with the				
		European Commission and MSs); or				
		 transferred to EASA by MSs (subject to 				
		discussion with MSs and the European				
		Commission).				
		If there is no interest from the European				
		Commission/MSs to amend the Basic				
		Regulation or transfer responsibilities on				
		verification, this option is legally not feasible				
		and may be discarded.				

Discarded option and reasoning

Option	Title	Description	Rationa	ale for discarding
Option	EASA develops	In this option, EASA develops and manages a central IT system	1.	No clear remit in the Basic Regulation for EASA to perform the assigned task of
1.5	and manages	for the EPL. It could be an additional layer to that provided by		hosting an IT system for the EPL.
	an IT EPL	Article 74 of the Basic Regulation regarding the REPIF.	2.	Unclear commitment/unclear number of MSs that are willing to join on a
	system and MSs	MSs on a voluntary basis conclude an agreement with EASA to		voluntary basis the EU IT system for the EPL.
	are invited to	procure to a third party the development/maintenance of a	3.	Risk of non-compliance with EU competition and state aid rules: EASA will act as
	join the system	common EU IT system. The system would allow presentation of		a private actor; therefore special attention needs to be paid to the funding of
	on a voluntary	an EPL in a mobile device.		the tool and the price asked to MSs for the 'service'. In addition, the risk of
	basis			imposing technical entry barriers needs to be considered.
		EASA acts as a private actor to develop and host such system. In	4.	Centralising a small amount of data from MSs on a voluntary basis has no
		addition, it would be responsible for confidential, authenticated,		advantage for EASA.



updated, complete and valid $\underline{\text{replication of information from the}}$ $\underline{\text{EPL}}.$

In this option, due to the voluntary nature of the agreement between EASA and MSs, there might be several MSs that wish to join the EU IT EPL system and some others that wish to have their own national IT system/platform and even some that would not have EPLs at all.

- 5. Evidence from the current practice in implementing the dLAP Proof of concept shows that not all MSs have interest in joining the system, which hampers the benefit of the option.
- 6. No earmark funds to develop/host the IT tool.
- 7. No (clear) benefit for EASA to develop/host this tool.
- 8. High political exposure and reputational risk if the information in the EU IT EPL system is not updated/secure, etc.
- 9. Risk that the centralisation of tool (versus decentralised development by MSs) may slow down the process of digitalisation.
- 10. Risk of proliferation of different IT tools, as some MSs may decide to join the EU IT EPL system and others not.

3. Conclusion

The optimal option for implementing RMT.0737, addressing the key questions, is determined to be **Option 1.1**. This proposal aims to introduce personnel licences issued in electronic format in a harmonised and coordinated manner across aviation personnel domains. EASA's role as a regulator will involve setting robust (technical) requirements through RMT.0737 for EPL display and verification, while allowing market providers to develop IT solutions in accordance with common (technical) standards. The lack of an integrated approach in transposing ICAO Annex 1 amendments could result in certain domains relevant to personnel licences falling behind in terms of compliance and interoperability. The implementation of the selected option would ensure transposition of the EPL standards of ICAO Annex 1 into the EU regulatory framework, promote cross-border licensing interoperability, facilitate personnel and business mobility, and enhance digital interactions in line with the broader EU strategy for digital public interoperability.

Appendix 2 — Quality of the NPA

To continuously improve the quality of its documents, EASA welcomes your feedback on the quality of this document regarding the following aspects:

Please provide your feedback on the quality of this document as part of the other comments you have on this NPA. We invite you to also provide a brief justification, especially when you disagree or strongly disagree, so that we consider this for improvement. Your comments will be considered for internal quality assurance and management purposes only and will not be published (e.g. as part of the CRD).

1. The regulatory proposal is of technically good/high quality

Please choose one of the options Fully agree / Agree / Neutral / Disagree / Strongly disagree

2. The text is clear, readable, and understandable

Please choose one of the options Fully agree / Agree / Neutral / Disagree / Strongly disagree

3. The regulatory proposal is well substantiated

Please choose one of the options Fully agree / Agree / Neutral / Disagree / Strongly disagree

4. The regulatory proposal is fit for purpose (achieving the objectives set)

Please choose one of the options Fully agree / Agree / Neutral / Disagree / Strongly disagree

5. The regulatory proposal is proportionate to the size of the issue

Please choose one of the options Fully agree / Agree / Neutral / Disagree / Strongly disagree

The regulatory proposal applies the 'better regulation' principles^[1] 6.

Please choose one of the options Fully agree / Agree / Neutral / Disagree / Strongly disagree

7. Any other comments on the quality of this document (please specify)

https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-proposing-law/better-reg how/better-regulation-guidelines-and-toolbox en



^[1] For information and guidance, see:

https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-proposing-law/better-reg how en