European Union Aviation Safety Agency

Notice of Proposed Amendment 2022-02 (A)

in accordance with
Articles 6(3), 7 and 8 ('Standard procedure': public consultation) of MB Decision No 18-2015

Remote aerodrome air traffic services

RMT.0624

EXECUTIVE SUMMARY

The concept of remote provision of aerodrome air traffic services (ATS) (commonly known as 'remote towers' or 'remote tower operations', sometimes referred to as 'digital towers') enables the provision of aerodrome ATS from locations/facilities where direct visual observation is not available. Instead, the provision of aerodrome ATS is based on a view of the aerodrome and its vicinity through means of technology. The term that is used to describe this is 'remote aerodrome ATS'.

This Notice of Proposed Amendment (NPA) addresses the evolving technological, procedural and operational aspects of remote aerodrome ATS, with the aim of facilitating its safe and uniform implementation by the EASA Member States, in accordance with the objectives of ATS, and of promoting the development and deployment of new digital technologies. The proposal is intended to support the stakeholders involved, in particular air navigation service providers (ANSPs), aerodrome operators, and national competent authorities (NCAs) in the decision-making and implementation activities. The NPA proposes revised and comprehensive guidance on remote aerodrome ATS, further developing that issued by the European Union Aviation Safety Agency (EASA) in 2019 with ED Decision 2019/004/R; it still relates to the existing regulatory framework, in particular but not limited to Regulation (EU) 2018/1139 (the 'Basic Regulation'), Regulation 2017/373 (the 'ATM/ANS Common Requirements Regulation'), Regulation (EU) No 139/2014 (the 'Aerodrome Regulation') and Regulation (EU) No 923/2012 (the standardised European rules of the air (SERA) Regulation).

The amended guidance duly considers a variety of inputs, such as implementation experience, technological and operational developments and novelties, stakeholders' feedback, such as results from an extensive survey issued by EASA and subsequent inputs received from the related Rulemaking Group Members.

With this NPA, stakeholders are invited to provide feedback also on specific issues of ATCO licensing nature related to remote aerodrome ATS provision.

NPA 2022-02 is divided in two parts. The present NPA 2022-02 (A) includes:

— the procedural information pertaining to the regulatory proposal; and

— the explanatory note to the proposed amendments.

Domain:	SESAR deployment		
Related rules:	GM on remote aerodrome air traffic services — Issue 2		
Affected stakeholders:	NCAs, ANSPs and aerodrome operators		
Driver:	Safety	**Rulemaking group:**	Yes
Impact assessment:	No	**Rulemaking Procedure:**	Standard

EASA rulemaking procedure milestones

Start Terms of Reference	**Public consultation**	**Proposal to the Commission** EASA Opinion	**Adoption by the Commission** Implementing/Delegated act	**Decision** Guidance Material
11.12.2019	**2.5.2022**	**n/a**	**n/a**	**2023 Q/4**

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1. About this NPA

1.1. How this NPA was developed

EASA developed this NPA in line with the Basic Regulation[1] and the Rulemaking Procedure[2]. This rulemaking task (RMT).0624 is included in Volume II of the European Plan for Aviation Safety (EPAS) for 2022-2026[3]. The scope and timescales of the task were defined in the related Terms of Reference – Issue 2 (ToR)[4].

This NPA includes a proposal to introduce 'Guidance Material on remote aerodrome air traffic services' — Issue 3', replacing Issue 2 of the Guidance Material (GM) published with ED Decision 2019/004/R[5]. This NPA is based on the input of Rulemaking Group (RMG) RMT.0624 and on information stemming from related research (e.g. SESAR), standardisation (EUROCAE Working Group 100) and implementation activities.

Additionally, in the context of the RMT.0624 activities, EASA launched a survey to gather information from a wide spectrum of stakeholders in order to assess the advances in the field since the last issue of the GM and to identify the parts where the GM needs updates. At an initial stage, all possible questions were gathered that resulted in a 104-question survey. Answers were received from 36 stakeholders including NCAs, ANSPs, system developers and manufacturers, unions and one MET provider. Based on the information received, eventually 47 actions were identified, on which the RMG worked in several smaller teams.

The NPA is hereby submitted to all interested parties for consultation in accordance with Article 115 of the Basic Regulation, and Articles 6(3), 7 and 8 of the Rulemaking Procedure.

The major milestones of this RMT are presented on the cover page.

1.2. How to comment on this NPA

Please submit your comments using the automated **Comment-Response Tool (CRT)** available at **http://hub.easa.europa.eu/crt/**[6].

The deadline for the submission of comments is **2 August 2022**.

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

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

3 https://www.easa.europa.eu/document-library/general-publications/european-plan-aviation-safety-2022-2026

4 https://www.easa.europa.eu/downloads/17937/en

5 https://www.easa.europa.eu/document-library/agency-decisions/ed-decision-2019004r

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

1.3. The next steps

Following the public consultation period, EASA will review all the comments received.

The individual comments received on this NPA and the EASA responses to them will be reflected in a comment-response document (CRD), which will be published on the EASA website[7].

Based on the analysis of the comments received, EASA will publish a decision to issue Issue 3 of the 'Guidance Material on remote aerodrome air traffic services'.

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

2. In summary — why and what

2.1. Why we need to amend the rules — issue/rationale

The rationale and the approach for undertaking a regulatory activity to support the implementation of remote aerodrome ATS are both explained in Section 2.1 of NPA 2017-21[8].

The fundamental principle for this EASA initiative is to ensure that remote aerodrome ATS are provided with, at least, the same level of safety as if the service were provided locally, and that operations and airspace users are not negatively affected by the new concept. As a baseline, according to the ATM/ANS Common Requirements Regulation[9], any implementation of the provision of remote aerodrome ATS shall fulfil the requirements relevant to the changes to the ATM/ANS functional system.

An increasing number of initiatives to provide remote aerodrome ATS are being undertaken within numerous EASA Member States as well as worldwide. Many of these initiatives consider the operational context and applications that warrant the update of the previously published EASA GM.

Issue 2 of the ToR for RMT.0624 was issued in order to address the increased scope of the remote aerodrome ATS concept as well as the latest SESAR developments and results from other available research and validation activities. Following that, it is possible to benefit from the operational experience gained, support implementation initiatives as well as meet expectations of the ATM community from EASA.

The work undertaken under this further iteration of RMT.0624 determined the need to further enhance the existing guidance on specific regulatory, technological and operational aspects, considering but not limited to the following:

— both single and multiple mode of operation;

— human factors (HF)/performance related to the new technology;

— aerodrome constraints (placement of equipment versus obstacle surfaces);

— hotspot cameras in a conventional tower (TWR);

— multiple mode of mixed conventional and remote aerodrome ATS; and

— third-party communication (leased commercial telecommunication lines) between remote tower sensors and operational facility: risks and mitigations.

2.2. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. This NPA will contribute to achieving the overall objectives by addressing the issues described in Section 2.1.

[8] https://www.easa.europa.eu/document-library/notices-of-proposed-amendment/npa-2017-21

[9] Commission Implementing Regulation (EU) 2017/373 of 1 March 2017 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011, (EU) No 1035/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011 (OJ L 62, 8.3.2017, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R0373&qid=1647279094929).

According to the ToR, the general objectives of RMT.0624 are to:

— support the implementation of the provision of remote aerodrome ATS;

— review and, if necessary, further refine and complement the existing EASA material;

— support the harmonisation of as well as ensure the safe provision of ATS.

The specific objective of this proposal is to extend the scope of 'Guidance Material on remote aerodrome air traffic services' — Issue 2 in order to consider and address new developments and operational experience gained with the effective implementation of the provision of remote aerodrome ATS in several countries, utilising different concepts and technical solutions, thus supporting the safety and efficiency of air operations.

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

The approach to keep the level of the material as 'guidelines' ('Guidance Material on remote aerodrome air traffic services') in the context of the EU regulatory framework was discussed during the work of the RMG. The reasons established in the previous phase of RMT.0624 are still considered valid, namely: remote aerodrome ATS is consistent with, and within the scope of, the existing regulatory framework (ICAO and EU) and there is no change in service provision (aerodrome ATS). Furthermore, in the EU regulatory framework, the provisions related to the assessment of changes to functional systems and to their oversight are included in the Basic Regulation and in the ATM/ANS Common Requirements Regulation. Concerning the latter, a large set of AMC and GM are already available to support ANSPs and their competent authorities (CAs) in safely assessing and overseeing the changes to functional systems.

EASA still considers that it is easier for those involved in the implementation of remote aerodrome ATS to have a single source of information encompassing all the aspects together, rather than specific AMC or GM to higher-level provisions/regulations, which would render the overall application complex. For the reasons described, the guideline level has been chosen to be maintained in order to provide a single document with guidance and proportionate regulatory support for the implementation of remote aerodrome ATS. The only exemption is the material addressing the air traffic controller (ATCO) licensing aspect for which EASA has chosen to have separate AMC and GM focusing on the establishment of high-level guidance for the training and qualification of ATCOs, but in the third phase of RMG.0624 said AMC and GM remain unchanged.

The GM was subject to a comprehensive review which allowed to validate, remove, or further expand the existing guidance as well as to address new subjects, as considered appropriate. This section provides an overview of the proposed amendments.

Throughout the document the references to the applicable rules have been updated, removing those referring to repealed regulations and introducing ones where a new regulation came into force during the time since the publication of the last issue of the GM.

In *Chapter 1. Introduction*, some clarifications and further explanations are given. The scope was extended to include socio-economic considerations and mixed conventional and remote aerodrome ATS operations, that were left out from the previous issue of the GM. Based on the discussions held with the RMG, this NPA includes proposed guidance on such aspects, as they might have an impact on

the safe provision of services and consequently on the safety of operations. Accordingly, a new dedicated chapter was introduced (see description of *Chapter 6* later).

In *Chapter 2. Definitions*, only some editorial changes are proposed, while the definitions themselves remained unchanged. Further to stakeholders' feedback and a request from some RMG members, the change of the term 'remote aerodrome ATS' was considered, as the term 'remote' could be considered misleading because in many installations the equipment is located at the airport served by the technology; it is thus not remote. Terms as 'virtual tower' or 'digital tower' were suggested instead. After due consideration, it was concluded that the existing definition is suitable, well established and consistently used in the EU regulatory framework, so a change to another — possibly also misleading, and in most cases promoted by some manufacturers — definition would not bring any benefit; it would instead upset a well-established and consisently used term.

In *Chapter 3. The remote aerodrome ATS concept and modes of operation*, only some minor changes are proposed, the most significant being the addition and description of the term 'mixed conventional and remote aerodrome ATS operations'.

In *Chapter 4. Operational context/applications and related recommendations*, a new section (*4.4. Remote tower centre operations)* was introduced, providing guidance on supervision and multiple ATCO endorsements. This new content was developed building on the feedback received to a dedicated question in the survey (For how many different aerodromes (remote or conventional) can you hold concurrently a valid unit endorsement based on ADI or ADV ratings?). The subject was further investigated with holders of multiple endorsements and ANSPs employing ATCOs with multiple endorsements. Derived from safety considerations, the new text considers today's experience from the implementation of remote tower centres (RTCs) and proposes a maximum of three concurrent valid unit endorsements. Consideration was given to the requirements of Regulation (EU) 2015/340[10] (point ATCO.B.025(a)(3)). The level of harmonisation of equipment and operational procedures, which could be progressively achieved in the future, could support the increase of the number of concurrent unit endorsements..

In *Chapter 5. Operational and system considerations*, several updates are proposed.

In *Section 5.2. Visual surveillance system,* some extended explanations are added based on the recently published new version of the EUROCAE Minimum Aviation System Performance Standards (MASPS) Document (ED-240A Change 1). Accordingly, as the EUROCAE MASPS describes only the minimum requirements, ANSPs should define individually operational visual requirements. To give guidance in this respect, some new material is introduced.

Section 5.2.7.5 Difference in daylight/darkness perception is completely redrafted as the survey indicated the need for a recommendation regarding the availability of real light conditions. As the cameras change the light conditions of the outside view, it is necessary for the ATCO/AFISO to get information about real-time realistic light conditions somewhere from the controller working position (CWP). The text is amended accordingly.

[10] 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) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015R0340&qid=1647344296007).

In *Section 5.6. Voice and data recording*, further elaboration is provided on the application of provision ATS.OR.460 of the ATM/ANS Common Requirements Regulation that transposes the applicable ICAO Standards and Recommended Practices (SARPs). Guidance is provided on how to define recording requirements with references to the applicable legislation.

Some minor refinement is proposed to *Section 5.7.2. Management of other aerodrome assets*.

A new *Section 5.8.1. Remote aerodrome ATS equipment used for MET observation purposes* is introduced as it was identified that although meteorological operations (METOPS) — as they are out of scope of ATS — are not addressed in the GM, if visual surveillance equipment is used for METOPS purposes, then such use has to be assessed during system development, certification and operation.

Section 5.10. Technical architecture, interdependencies and redundancy aspects is also extended — and the title changed accordingly — with the introduction of guidance on interdependencies between several aerodromes to which ATS are provided from the same RTC/facility. Several stakeholder inputs pointed to this issue, and in particular to the filing of alternate aerodromes in flight plans. If the destination aerodrome and all alternate aerodromes, filed in one flight plan, are part of one RTC, a possible failure of the RTC could affect the availability of ATS at those aerodromes. If airspace users are not aware of the interdependencies between those aerodromes, a hazardous situation can occur as ATS would not be available at any of the airports selected in the flight plans. The assessment of the issue in cooperation with the RMG members allowed to develop an amended proposed text with regard to flight planning (see later in the explanation for the change in *Chapter 9*.).

In *Section 5.12. Working environment*, a reference to applicable ISO standards is introduced.

Chapter 6. Management of change is completely re-elaborated and modified.

A new *Section 6.1. Addressing socio-economic factors* is added to support the appropriate consideration of the social and economic dimension in the decision-making, implementation and operation of remote tower operations, and to propose related actions and mitigating measures. The inclusion of this Section has been strongly supported both by stakeholders (through the survey) and by the RMG members. It seems rather evident that there is a social impact on a variety of aspects in the implementation of the remote tower concept, be it positive or negative. The proposed guidance provides some examples of situations related to social aspects to be considered when introducing remote tower operations. Socio-economic factors are not unrelated to safety; it is widely recognised that there are interdependencies between those areas. Therefore, to ensure safe implementation, all aspects of the change should be considered; to this end, this section provides some generic guidance on them as a generic invitation for consideration to the stakeholders involved, although not directly linked to ATS provision.

The section on *Safety assessment* (*6.2*) is extended with new references to chapters inside the GM where interdependencies are discussed, as this new topic is one of those where strong stakeholder demand was recorded during the RMG work.

The section on *Human factors assessment* (*6.3*) is reworked completely based on the outcome of the survey and of the subsequent experts' assessment. Related questions were asked as to whether the existing section on HF assessment in the GM was useful and complete. The feedback received indicated that certain aspects would require more clarity, and more guidance on the HF assessments would be needed. There was also inquiry if specific HF-related information was missing in the GM. The answers stated that certain aspects could be better placed within the document. Some HF issues were

also identified that have to be considered while implementing RTC. It was concluded that certain aspects (like usability, fatigue, extra staffing) should be added. In line with the objectives and the comments, the guidance is amended by adding specific HF terms like acceptability and trust to the respective elements. Additionally, certain examples are added to clarify the content of the text. Furthermore, *Section 6.3* was completed with additional explanatory text explaining HF methodologies and their application, and a reference to existing HF processes has been included. *Section 6.4* is amended with recommendations for involving end users early in the projects too. In terms of structure, certain text — relevant to HF content — is moved within the document (e.g. a link to *Section 5.12* has been added in the HF section). Additionally, the HF elements are amended suggesting to pay due consideration to system usability, as well as physical and mental fatigue.

A new section discussing *Social aspects to consider during transition to remote aerodrome ATS* (*6.3.3*) is also added in relation with the introduction of the socio-economic aspect into the GM (see above).

A new section on *Involvement of users* (*6.4*) is added, providing guidance on the early involvement of affected stakeholders in a remote tower project to facilitate acceptance from all parties.

A new section on *Migration from a conventional tower to a remote contingency tower* (*6.5.2*) is introduced, to further develop the guidance for the transition phase when the remote tower module is used exclusively for contingency operations, according to the information gathered from stakeholders who implemented remote aerodrome ATS.

The section on *Contingency planning and degraded mode procedures* (*6.7*) is extended with further elaborations on the topic especially on procedures for RTC operations, as from the survey it could be concluded that the level of guidance provided on this topic needed to be expanded.

Chapter 7. Aerodrome-related aspects is also reworked; considerations concerning the application of the requirement of point ADR.OR.B.040 of the Aerodrome Regulation have been added.

The section on *Local agreement between aerodrome and ATM/ANS providers* (*7.1.3*) is extended with elements to be considered after putting the system into operation.

A new section on *Equipment placement constraints* (*7.1.4*) is introduced, as it was determined that this topic can cause many problems during installation, and guidance is missing from the current issue of the GM. All relevant ICAO SARPs and the Aerodrome Regulation[11] are elaborated, and related guidance on application is provided. It should be noted that unanimity on the completeness of such new section was not reached within the RMG members, as some of its members considered it insufficient. EASA wishes to request the stakeholders' views about the completeness and the clarity of the guidance.

QUESTION: Is the guidance given in Section 7.1.4 considered sufficient? If not, which aspects should be included and subject to an extended elaboration?

Chapter 8. Possible impact on airspace users is completely rewritten. The guidance is supplemented with a general link to the ATM/ANS Common Requirements Regulation. Also, a reference to the requirements of point ATM/ANS.OR.A.045 of the ATM/ANS Common Requirements Regulation and GM1 ADR.OR.D.027 of the AMC & GM to the Aerodrome Regulation is added to address the impacts

[11] Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 44, 14.2.2014, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014R0139&qid=1647352009864).

and mitigation measures for airspace users. The aerodrome interdependency issue (see above) is also reflected here.

The current text of *Chapter 9. Aeronautical information products and services* is replaced with new text providing guidance on the implementation, in the context of remote towers, of the new Part-AIS requirements introduced through Regulation (EU) 2020/469 in the ATM/ANS Common Requirements. During the development of the RMT activities, it was underlined that *Appendix 1 — PART 3 — AERODROMES — AD 2.23 Additional Information* in Part-AIS includes a requirement for the aircrew with regard to the selection of the alternate aerodrome, in circumstances where both the destination and the selected alternate aerodrome are served by the same RTC. EASA acknowledges that such a requirement is misplaced as it addresses aircraft operators directly; also its substance might need to be revised, as it currently does not potentially allow flight operations in areas where all aerodromes are served by the same centre. Another aspect to be considered is the existence of contingency procedures established by the ATS provider concerned, which might mitigate the issue. EASA is evaluating a revision of the affected rules (Part-ATS and Part-AIS of the ATM/ANS Common Requirements Regulation and Regulation (EU) No 965/2012[12]) to address the issue and ensure the necessary clarity, legal certainty and assurance of the safety level. In support to such a revision, **EASA wishes to get stakeholders' feedback on the subject.**

In *Chapter 10. Qualification and training considerations* only the legislative references are changed.

The section on *Qualification and training of ATSEP (10.3)* is extended with the material from the new AMC & GM to Part-PERS describing the new training streams concept and its application to remote tower equipment.

References (*Chapter 11.*) have been reviewed and updated.

Appendix 1 on *Checklist for the implementation of remote aerodrome ATS* (*12.1*) has been extended with the newly introduced socio-economic factors and the extension of *Chapter 6.*

Finally, it has been decided to include the SESAR baseline 'operational visual performance requirements' derived from the final SESAR 1 OSED (OSED for Remote Provision of ATS to Aerodromes, SESAR JU Deliverable D94) as *Appendix 5 as* it was deemed necessary to extend the guidance on how to use standards and define requirements.

2.4. Stakeholders' views on unit endorsements for remote aerodrome air traffic services provision

Stakeholders' comments received to NPA 2021-08 'Enhanced mobility options and streamlined qualifications for air traffic controllers', published as a deliverable of RMT.0668, asked for clarifications on the ATCOs' unit endorsement privileges when providing remote services in multiple mode of operation.

[12] Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012R0965&qid=1647353452755).

It is considered that this issue affects a wider stakeholder community than that being traditionally interested in ATCO licensing. EASA wishes therefore to transparently involve more stakeholders into the exchange on the establishment of unit endorsements for remote aerodrome air traffic services.

According to AMC1 ATCO.B.020(a) related to Regulation (EU) 2015/340, each aerodrome for which aerodrome ATC service is provided from an RTC, should constitute its own unit endorsement. Considering the establishment of RTCs and multiple mode of operation, EASA is interested in the stakeholders' feedback on the following:

1. Should the remote centre location indicator be used in the unit endorsement?
2. Should the privilege to provide services in multiple mode of operation be indicated by the unit endorsement?
3. Should the combination of different aerodromes attended simultaneously from one remote tower module be indicated in the unit endorsement(s)?
4. Should a unit endorsement for the remote service provision in multiple mode of operation for a group of aerodromes authorise the holder to provide air traffic control services for any combination of the aerodromes included in that unit endorsement?
5. Should a unit endorsement for the remote service provision in multiple mode of operation for a group of aerodromes also authorise the holder to provide air traffic control services in single mode for any of the aerodromes included in that unit endorsement?

Stakeholders are invited to indicate their preferred options, or alternatively, to propose another suitable and justified solution to the above issues. For any of the proposed solutions, stakeholders are invited to provide justification elements on the possible safety, social, economic, and other relevant impact of the option chosen.

These issues and related questions above will be also submitted for consultation with the NPA resulting from RMT.0668 Subtask 4 that is intended to update the air traffic controller licensing rules in terms of harmonising training standards and enabling virtual and online training, scheduled for Q2 2022.

The feedback received from the public consultation of both NPAs will be assessed, and the related conclusions will be included in the Opinion and associated documentation resulting from the activities of RMT.0668.

2.5. What are the expected benefits and drawbacks of the proposed amendments

The main benefit of the proposal is the expanded and up-to-date guidance and regulatory support that facilitates the safe and harmonised implementation of remote aerodrome ATS by the ANSPs and their competent authorities. As such, it allows them to consider all the necessary safety aspects without impairing technological developments.

The only and partial drawback of the proposal is that, at the time of writing, the concept of multiple mode of operation is less mature than that of single mode of operation. SESAR has, to date, published one solution related to the multiple mode of operation and, in addition, several SESAR large-scale demonstrations of the multiple mode of operation have been performed. However, no operational implementation of this mode of operation is actually in place; subsequently, no operational experience is available. Implementation plans for the multiple mode of operation still exists in various

EU Member States, hence such mode of operations is likely to become a reality in the near future, subject to approval of the competent authorities. It is important to conclude that EASA intends to support the ongoing implementation projects by providing as much guidance as possible based on the existing available information and data. It is also important to consider that EASA, as part of the proposed guidelines, formulates some recommended limitations, as well as mitigation measures for handling risks related to the multiple mode of operation, taking into account its current level of maturity.

3. Proposed Guidance Material

Please refer to NPA 2022-02 (B).

4. Impact assessment (IA)

For the main benefits and drawbacks, see Section 2.4. No further detailed impact assessment has been conducted as the NPA proposes a revision of previously published Guidance Material related to a pre-existing and well-established regulatory frameworks. Being this the third issue of such Guidance Material, the same approach adopted in the previous iteration has been followed.

5. Proposed actions to support implementation

— Focused communication for Advisory Body meeting(s) (MAB/SAB/TeB/TEC/COM)

— Clarifications via electronic communication tools between EASA and NCAs (EUSurvey or other)

— Dedicated thematic workshop/session

— Combination of the above-mentioned means

6. References

6.1. Related EU regulations

— 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)

— Commission Implementing Regulation (EU) 2017/373 of 1 March 2017 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011, (EU) No 1035/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011 (OJ L 62, 8.3.2017, p. 1)

— 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)

— Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (OJ L 281, 13.10.2012, p. 1)

— Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 44, 14.2.2014, p. 1)

6.2. Related EASA decisions

— Executive Director Decision 2019/004/R of 15 February 2019 issuing Guidance Material on remote aerodrome air traffic services and repealing Decision 2015/014/R of the Executive Director of the Agency of 3 July 2015 ‘Guidance Material on remote aerodrome air traffic services’ — Issue 2

— Executive Director Decision 2017/001/R of 8 March 2017 issuing Acceptable Means of Compliance and Guidance Material to Commission Implementing Regulation (EU) 2017/373 ‘Common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight’

— Decision 2013/013/R of the Executive Director of the European Aviation Safety Agency of 17 July 2013 adopting the Acceptable Means of Compliance and Guidance Material to Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common

rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/20101 'Acceptable Means of Compliance and Guidance Material to the rules of the air'

— Decision 2014/013/R of the Executive Director of the European Aviation Safety Agency of 27 February 2014 adopting Certification Specifications and Guidance Material for Aerodromes Design 'CS-ADR-DSN - Initial issue'

6.3. Other references

EUROCAE ED-240A Change 1, 'Minimum Aviation System Performance Standard (MASPS) for Remote Tower Optical Systems', September 2021

7. Appendix

N/A

8. Quality of the NPA

To continuously improve the quality of its documents, EASA welcomes your feedback on the quality of this NPA with regard to the following aspects:

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

Please choose one of the options below and place it as a comment in CRT; if you disagree or strongly disagree, please provide a brief justification.
Fully agree / Agree / Neutral / Disagree / Strongly disagree

8.2. The text is clear, readable and understandable

Please choose one of the options below and place it as a comment in CRT; if you disagree or strongly disagree, please provide a brief justification.
Fully agree / Agree / Neutral / Disagree / Strongly disagree

8.3. The regulatory proposal is well substantiated

Please choose one of the options below and place it as a comment in CRT; if you disagree or strongly disagree, please provide a brief justification.
Fully agree / Agree / Neutral / Disagree / Strongly disagree

8.4. The regulatory proposal is fit for purpose (capable of achieving the objectives set)

Please choose one of the options below and place it as a comment in CRT; if you disagree or strongly disagree, please provide a brief justification.
Fully agree / Agree / Neutral / Disagree / Strongly disagree

8.5. The impact assessment (IA), as well as its qualitative and quantitative data, is of high quality

Please choose one of the options below and place it as a comment in CRT; if you disagree or strongly disagree, please provide a brief justification.
Fully agree / Agree / Neutral / Disagree / Strongly disagree

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

Please choose one of the options below and place it as a comment in CRT; if you disagree or strongly disagree, please provide a brief justification.
Fully agree / Agree / Neutral / Disagree / Strongly disagree

8.7. Any other comments on the quality of this NPA (please specify)

Note: Your comments on Chapter 8 will be considered for internal quality assurance and management purposes only and will not be published in the related CRD.

[1] For information and guidance, see:
- https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how_en
- https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-toolbox_en
- https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-toolbox/better-regulation-toolbox_en