



# Notice of Proposed Amendment 2016-09(A)

## Requirements for air traffic services

RMT.0464 — 14.9.2016

### EXECUTIVE SUMMARY

This Notice of Proposed Amendment (NPA) addresses safety and regulatory coordination issues related to the provision of air traffic services (ATS).

The main objective of this NPA is to maintain a high level of safety in the European Union (EU) air navigation system, in particular with regard to the provision of ATS. In order to achieve this objective, the proposal aims at:

- transposing the relevant International Civil Aviation Organization (ICAO) provisions on ATS into the EU aviation regulatory framework, thus contributing to their uniform implementation throughout the EU, and supporting EU Member States in fulfilling their obligations stemming from the Chicago Convention; and
- defining proportionate and cost-efficient rules.

The NPA introduces a detailed set of provisions to be placed in the ‘ATM/ANS Common Requirements Regulation’, in particular in Annex IV thereto, and thus removes the existing provision referencing to ICAO Annexes. These provisions provide implementation of the Essential Requirements in Annex Vb 2.(c) to Regulation (EC) No 216/2008. It also proposes associated AMC and GM to facilitate the application by the affected stakeholders.

In addition to the transposition of the ICAO provisions, this NPA proposes a number of measures related to the aerodrome flight information service (AFIS) as this is not explicitly addressed in the ICAO Standards and Recommended Practices (SARPs). In this way, this service is proposed to be regulated in the EU context, thus reducing the high diversity of the existing implementation across the EU Member States. In this context, Member States may decide not to provide ATS (ATC or AFIS) at smaller airfields, where the so-called ‘UNICOM stations’, not addressed by EU ATS rules, may be established to support local and, in particular, General Aviation activities.

As this NPA and Regulation (EU) No 923/2012 (standardised rules of the air (SERA)) are closely interrelated, the NPA also proposes minor amendments to said Regulation, which was recently amended by Regulation (EU) 2016/1185.

Safety recommendations submitted to the Agency are also addressed by this proposal.

NPA 2016-09 is divided in two parts. The present sub-NPA(A) includes:

- the procedural information pertaining to the regulatory proposal;
- the explanatory note to the proposed amendments; and
- the regulatory impact assessment.

Applicability		Process map	
Affected regulations and decisions:	<ul style="list-style-type: none"> <li>— Regulation (EU) 2016/1377;</li> <li>— the upcoming related ED Decision;</li> <li>— Regulation (EU) No 923/2012;</li> <li>— ED Decision 2013/013/R</li> </ul>	Concept paper:	No
		Terms of Reference:	9.7.2014
		Rulemaking group:	Yes
		RIA type:	Full
Affected stakeholders:	Member States; competent authorities; air navigation service providers; air traffic controllers; aircraft operators; professional organisations; trade unions; pilots; passengers	Technical consultation during NPA drafting:	No
		Duration of NPA consultation:	4 months
		Review group:	Yes
Driver/origin:	Safety	Focused consultation:	Yes
Reference:	Please refer to Section 4.3. of this NPA	Publication date of the opinion:	Q2/2017
		Publication date of the decision:	Q4/2017



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## 1. Procedural information

### 1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed this NPA in line with Regulation (EC) No 216/2008<sup>1</sup> (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure<sup>2</sup>.

This rulemaking activity is included in the Agency's [5-year Rulemaking Programme](#) under RMT.0464.

The text of this NPA has been developed by the Agency, based on the inputs of the Rulemaking Group (RMG) for RMT.0464. It is hereby submitted for consultation of all interested parties<sup>3</sup>.

The process map on the title page contains the major milestones of this rulemaking activity to date and provides an outlook of the timescales of the next steps.

### 1.2. The structure of this NPA and related documents

NPA 2016-09(A) is structured as follows:

- Chapter 1 contains the procedural information related to this task;
- Chapter 2 (explanatory note) explains the core technical content;
- Chapter 3 contains the regulatory impact assessment (RIA) showing which options were considered and what impacts were identified, thereby providing the detailed justification for this NPA; and
- Chapter 4 contains a list of reference documents.

NPA 2016-09(B) contains the proposed text for the new requirements (implementing rules (IRs), acceptable means of compliance (AMC), and guidance material (GM)).

Additionally, for information purposes only, the Agency is providing the following documents on the webpage where the present NPA is published:

- a table containing the comparisons between the ICAO Annex 11 provisions and the proposed text (hereinafter referred to as the 'Annex 11 Checklist');
- a table containing the comparisons between the ICAO PANS ATM provisions and the proposed text (hereinafter referred to as the 'PANS ATM Checklist'); and

<sup>1</sup> Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1464170711619&uri=CELEX:32008R0216>).

<sup>2</sup> The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such a process has been adopted by the Agency's 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 the Agency for the issuing of opinions, certification Specifications and guidance material (<http://www.easa.europa.eu/system/files/dfu/EASA%20MB%20Decision%2018-2015%20on%20Rulemaking%20Procedure.pdf>).

<sup>3</sup> In accordance with Article 52 of the Basic Regulation and Articles 6(3) and 7 of the Rulemaking Procedure.



- the ‘Summary of the survey on Aerodrome Flight Information Service’, including the analysis of the responses received to said survey issued by the Agency during 2015 to support the decision-making on regulatory activities concerning AFIS.

### 1.3. 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/>.

The deadline for the submission of comments is **16 January 2017**.

Furthermore, it is important to be noted that throughout Chapter 2 (explanatory note) and Chapter 3 (RIA) there are issues on which the Agency explicitly invites stakeholders to answer to questions and express their opinion. The Agency is addressing said questions to stakeholders in order to receive further guidance during the consultation of this NPA with a view to gaining additional information and the opinion of a wider audience.

### 1.4. The next steps in the procedure

Following the closing of the NPA public consultation period, the Agency will review all comments and perform, as necessary, a focused consultation which will consist of involving relevant technical experts in the review of the comments and in the drafting of the revised rule text.

The outcome of the NPA public consultation, as well as of the focused consultation, will be reflected in a comment-response document (CRD).

The Agency will publish the CRD concurrently with the opinion.

The opinion, based on this NPA and on the outcome of the consultation, contains the proposed amendments to:

- Regulation (EU) 2016/1377<sup>4</sup> (hereinafter referred to as the ‘ATM/ANS Common Requirements Regulation’). This Regulation is currently being reviewed by the European Commission and is expected to be reissued in due course; and
- Regulation (EU) No 923/2012<sup>5</sup> as amended by Regulation (EU) 2016/1185 (hereinafter referred to as the ‘SERA Regulation’),

and is submitted to the European Commission to be used as a technical basis in order to prepare an EU regulation.

Following the adoption of the regulation, the Agency will issue a decision containing the related AMC and GM.

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<sup>4</sup> Commission Implementing Regulation (EU) 2016/1377 of 4 August 2016 laying down common requirements for service providers and the oversight in air traffic management/air navigation services and other air traffic management network functions, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011 and amending Regulation (EU) No 677/2011 (OJ L 226, 19.8.2016, p. 1) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1473425290921&uri=CELEX:32016R1377>).

<sup>5</sup> 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) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1465217255874&uri=CELEX:32012R0923>).



## 2. Explanatory note

This NPA proposes a set of rules for the provision of ATS, which include air traffic control (ATC) service, flight information service (FIS) and alerting service.

### 2.1. Overview of the issues to be addressed

Since decades, ATS have been provided worldwide in accordance with the SARPs included in Annex 2, Annex 10 Volume II, and in particular in Annex 11 to the Chicago Convention. In order to establish more detailed guidance on the implementation of the ATS provisions established in the Annexes, which are often expressed in the form of principles, ICAO publishes and maintains a set of related documents. The most relevant of such documents for the purposes of ATS is Doc 4444 'Procedures for Air Navigation Services — Air Traffic Management' (hereinafter referred to as the 'PANS ATM'), which specifies, in greater detail than in the aforementioned Annexes, the actual procedures to be applied by the relevant units in providing the various ATS to air traffic.

At the time of publication of this NPA, the provision of ATS in the EU is regulated primarily by Commission Implementing Regulation (EU) No 1035/2011<sup>6</sup> (Chapter 4 of Annex II), which, with a direct reference, stipulates that ATS providers shall demonstrate to apply working methods and operating procedures compliant with those in ICAO Annex 10 Volume II and Annex 11, as well as with provisions in the SERA Regulation. The latter transposed, inter alia, the relevant ICAO Annex 2 into the EU legislation with the purpose of establishing standardised European rules of the air.

As of 1 January 2019, Regulation (EU) No 1035/2011 will be repealed by the ATM/ANS Common Requirements Regulation, which establishes, under a single regulatory source, the requirements for the provision and oversight of ATM/ANS, including ATS. This new Regulation aims at ensuring full implementation of the principles of the Basic Regulation and of the relevant Essential Requirements in Annex Vb thereto; in the case of ATS, the Essential Requirements are included in Chapter 2.(c) of Annex Vb.

Within the structure of the ATM/ANS Common Requirements Regulation, Annex IV 'PART-ATS' contains the requirements for the provision of ATS. Subpart A of this Annex establishes organisation requirements specific for the ATS providers, in addition to those applicable to all ATM/ANS providers defined in Annex II to the aforementioned Regulation. Subpart B of Annex IV contains the technical requirements for the provision of ATS. In the absence of detailed and comprehensive rules in this field, and in anticipation of the outcome of this regulatory activity as per this NPA, technical requirements in Subpart B are still established by mere reference to the SERA Regulation and to the working methods and operation procedures in ICAO Annex 10 Volume II and Annex 11, as was the case for Regulation (EU) No 1035/2011.

This NPA proposes to close the intentional gap detailed above, by performing the necessary transposition of ICAO provisions into the EU regulatory framework. This step, although inevitable as elementary for setting the regulatory foundation within the EU framework and for meeting the obligations stemming from the Basic Regulation, particularly with regard to the Essential Requirements in Chapter 2.(c) of Annex Vb thereto, is furthermore beneficial as:

<sup>6</sup> Commission Implementing Regulation (EU) No 1035/2011 of 17 October 2011 laying down common requirements for the provision of air navigation services and amending Regulations (EC) No 482/2008 and (EU) No 691/2010 (OJ L 271, 18.10.2011, p. 23) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1465218526795&uri=CELEX:32011R1035>).



- the content of the subject ICAO Annexes alone is not sufficiently detailed to fully satisfy the aforementioned Essential Requirements;
- the formulation in passive voice of many ICAO SARPs does not always fit with the regulatory framework established by the Basic Regulation and by the ATM/ANS Common Requirements Regulation, which require the explicit allocation of the ‘active’ responsibility to undertake action; and
- it fosters the harmonisation of ATS provision throughout the EU, as it will lead to a reduction of the differences filed under the Chicago Convention.

Therefore, this NPA proposes to replace the provision with the references to ICAO Annexes, as in Subpart B of Annex IV, with a detailed and comprehensive set of measures adapted to the EU regulatory framework and operational context (IRs, AMC, and GM), derived mainly from the ICAO relevant provisions, not limited to those in Annex 10 Volume II and Annex 11, but considering also the relevant content of other ICAO Documents, primarily PANS ATM.

## 2.2. Objectives

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Section 2.1.

The specific objective of this proposal is to ensure that ATS are provided safely across the EU.

In order to achieve this objective, the proposal aims at:

- transposing the relevant ICAO provisions on ATS, thus contributing to their harmonised implementation, which will serve as a basis for EU aviation law;
- establishing a sufficient level of harmonisation throughout the EU, based on mandatory and flexible requirements; and
- defining proportionate and cost-efficient rules.

## 2.3. Summary of the regulatory impact assessment (RIA)

For the reasons explained in Section 3.1.1, the Agency did not perform a detailed RIA on the establishment of EU ATS requirements through the transposition of the ICAO relevant material, unlike what has happened concerning the proposed introduction of provisions for AFIS. The RIA, which is available in Chapter 3, considers the impact analysis of the following options:

**Option 0 ‘No policy change’:** No change to the actual EU rules; risks remain as outlined in the issue analysis.

**Option 1 ‘Essential and flexible AFIS rules’:** Definition of AFIS and its essential requirements consistent with existing ICAO ATS principles and EU legislation and practices, while ensuring certain flexibility.

**Option 2 ‘Comprehensive and prescriptive AFIS rules’:** Definition of AFIS and its complete mandatory requirements consistent with existing ICAO ATS principles and EU legislation.

The selected Option 1 establishes clarity on the provision of AFIS by proposing an explicit and balanced set of essential rules (IRs, AMC, and GM), which are flexible to the extent possible within the ATS context to accommodate local needs. The proposed rules are based on relevant ICAO principles and on



the EU legislation applicable to ATS, as well as on the existing practice throughout EU Member States. The inherent proportionality and flexibility of the proposal enables the selection of the appropriate service or facilitation for aviation operations at aerodromes, without generating limitations when no ATS (ATC or AFIS) is considered suitable or convenient. The resulting harmonisation of AFIS would bring safety benefits for aircraft operators and pilots as it will establish uniform operational principles throughout the EU, reducing thus the possibility for misinterpretation of the operational characteristics of the service provided.

#### 2.4. Transposition of ICAO provisions into PART-ATS

In compliance with the task of the Agency to assist the EU Member States in fulfilling their obligations under the Chicago Convention, when developing rules for the implementation of the principles and the Essential Requirements of the Basic Regulation, the relevant ICAO provisions needed to be transposed into the EU legislation, with the necessary adaptations. While this has been duly and nearly exhaustively performed in other technical domains by now (operations (OPS), flight crew licensing (FCL), aerodromes (ADR) etc.), and as explained in Section 2.1 above and 3.1.2 below, this approach also needs to be followed for the establishment of PART-ATS.

In order to select the provisions suitable for transposition as EU ATS requirements, the Agency, supported by RMG.0464, performed a very detailed and comprehensive analysis of the content of the following documents:

- ICAO Annex 11 including all the amendments up to and including No 49. This NPA does not include the content of Amendment No 50, introduced with the ICAO letter AN 13/13.1-16/39 of 11 April 2016, because the provisions subject to modifications have not been selected for transposition into ATS requirements with this NPA. The subjects dealt with by Amendment No 50, namely:
  - performance-based communication and surveillance (PBCS) to revise the existing provision regarding required communication performance (RCP);
  - procedure design and oversight; and
  - fatigue management for air traffic controllers (ATCOs),will be addressed by the Agency under separate rulemaking tasks;
- PANS ATM, including the modifications introduced with the ICAO Working Paper AN-WP/9014 dated 18 February 2016, approved by the ICAO Air Navigation Commission and resulting in Amendment 7 to PANS ATM;
- Doc 7030 EUR;
- ICAO Annex 10 Volume II; and
- other ATS-relevant ICAO and EUROCONTROL documents, listed in Section 4.3.

An analysis of the differences to Standards of Annex 11 notified by the EU Members States in accordance with Article 38 of the Chicago Convention was also performed, with the objective of identifying commonalities in such differences and, when appropriate, formulating proposals for common EU differences from the ICAO provisions.





As a general principle followed in drafting this proposal, ICAO Standards elected for transposition are proposed as IRs in recognition of their status under the Chicago Convention. The placement of the necessary Recommended Practices from the ICAO Annexes, PANS ATM and other material selected for transposition into IRs, AMC, and GM is determined on a case-by-case basis, according to their relevance in the given context, so that those parts where full harmonisation is desired were transposed as IRs, whereas the majority of the material is classified as AMC/GM. The Agency decided not to transpose those PANS ATM provisions which were assessed to be better suited as guidance contained in operations manuals rather than as regulatory material and did not require full harmonisation as they were neither affecting interoperability with airspace users nor safety to a great extent. The proposed transposition introduces a few differences from the original ICAO Standards; such differences are highlighted in the 'Annex 11 Checklist'.

As the original ICAO provisions are often formulated with the use of passive voice, the selected measures were organised and, when necessary, textually modified to allocate the responsibility for action unambiguously (to Member State, competent authority, ATS provider, ATS unit, ATCO/FIS/AFIS officer, etc.) in accordance with the EU regulatory drafting practice and, in particular, with the structure of the ATM/ANS Common Requirements Regulation, thus improving clarity.

The transposition was performed with a view to ensuring that measures are fully consistent with the relevant EU legislation, in particular with the ATM/ANS Common Requirements Regulation and with the SERA Regulation (see Section 2.5. 'Interrelation with the SERA Regulation').

The detailed analysis of Annex 11 allowed the identification of provisions which, in the opinion of the Agency and of RMG.0464, are not within the scope of PART-ATS as established by the Terms of Reference for RMT.0464<sup>7</sup>, but which would need to be considered and, if deemed appropriate, transposed by other EU regulatory activities, in particular those concerning SERA, Part-AIS, and Part-ASD. For example, provisions addressing both pilots and ATS units or ATCOs/FIS officers/AFIS officers, such as those related to flight plans in Section 4.4. of PANS ATM, or those related to controller-pilot data link communications (CPDLC) in Chapter 14 of PANS ATM, are by their nature better located in SERA; SARPs in Section 2.5 of Annex 11 concerning the designation of airspace and controlled aerodromes for the ATS provision purposes are considered suitable for transposition in PART-ASD. The Agency ensured and will continue to ensure appropriate coordination between the affected RMTs for this purpose.

When deemed necessary, a few amendments to the ATM/ANS Common Requirements Regulation or to the SERA Regulation are proposed by this NPA in order to ensure full alignment with the proposed provisions in PART-ATS.

The RMG.0464 members indicated the difficulties encountered in the transposition exercise, in particular those generated by the difference between the two regulatory systems (EU and ICAO). Such difficulties were faced in particular when performing the transposition of Procedures from PANS ATM, as in the context of this document the use of action verbs such as 'shall' and 'should' does not necessarily have the same meaning as that of these verbs in the EU regulatory framework. In the ICAO context, PANS are frequently designed to be flexible, in order to accommodate specific scenarios and environments. On the other hand, sometimes ICAO provisions originally destined as Standards have been relocated in Recommended Practices due to lack of agreement on binding implementation.

<sup>7</sup> <http://www.easa.europa.eu/system/files/dfu/ToR%20RMT.0464%20Issue%201.pdf>



Despite the very careful assessment and the best effort to ensure an effective transposition, the experts considered that the legal instruments available (IR, AMC, and GM) in the EU regulatory context could not always replicate the granularity and the nuances fit for a PANS, resulting in an either over-regulating or under-regulating provision. For these reasons, the RMG members requested the Agency to provide these explanations, so that the readers are aware of the limitations of the transposition exercise.

In order to facilitate the readers in tracking the transposition of ICAO provisions, at the bottom of each proposed measure in this NPA, there is the indication of the ICAO provision from which it originated.

In addition, the Agency has developed and issues as information material, on the webpage where the present NPA is published, the complete Annex 11 Checklist and PANS ATM Checklist, which provide a general cross-referencing between the ICAO original and the proposed regulation. For each provision of these ICAO documents, the checklists indicate the proposed transposition as ATS requirement within this NPA or the reason for not having been transposed (e.g. relevant other ATM/ANS-related or SERA regulatory activities, already transposed or covered by other existing EU requirements).

## 2.5. Interrelation with the SERA Regulation

The provision of ATS is closely interrelated with the application of the rules of the air. In the EU context, such rules are established by the SERA Regulation and the associated AMC/GM of ED Decision 2013/013/R<sup>8</sup>, which are based mainly on the transposition of relevant provisions from various ICAO documents, including Annex 2, and partial transposition of Annex 3, Annex 10 Volume II, Annex 11 and PANS ATM.

With the introduction of detailed and comprehensive ATS requirements within Annex IV (PART-ATS) to the ATM/ANS Common Requirements Regulation, the existing reference to the SERA Regulation is removed. The proposed introduction of recitals in both the SERA Regulation and the ATM/ANS Common Requirements Regulation, as explained in Sections 2.7.1.1 and 2.7.2 below, indicate that these two Regulations have to be read and applied in conjunction with each other.

The regulatory activities for the issue of the SERA regulatory package and of its successive amendments were undertaken far in advance of the initiation of RMT.0464. A number of provisions from Annex 11 and PANS ATM, when envisaging collective action for both aircrew and ATS, were transposed as EU measures, in the SERA Regulation. When performing the analysis of Annex 11 and PANS ATM, the Agency found that some of those ICAO provisions already transposed as IRs within the SERA Regulation are also fundamental in the context of Annex IV (PART-ATS), as they would ensure the completeness and the coherence of the EU ATS requirements. Moreover, their presence in PART-ATS would facilitate the transposition of other ICAO provisions considered to be suitable and necessary as AMC or GM, while their transposition within the SERA regulatory package was not considered appropriate, as they address only ATS provision and do not envisage a collective aircrew/ATS action.

After careful consideration, the Agency opted to propose the duplication of a number of relevant SERA requirements as EU ATS requirements to ensure the completeness of the text and to improve readability. In this context, the Agency also identified the need to amend the original text of a limited number of SERA provisions duplicated as ATS provisions. The rationale behind these proposed amendments and the proposed text are included in Sections 2.7.2, 2.7.3 of this NPA 2016-09(A) and in

<sup>8</sup> <http://www.easa.europa.eu/document-library/agency-decisions/ed-decision-2013013r>



Sections 1.2 and 1.4 of NPA 2016-09(B) respectively. The Agency is committed to ensure full consistency between the duplicated provisions and between the respective AMC/GM in the two regulatory packages throughout the development of this Rulemaking Task as well as through the future rules maintenance activities.

## 2.6. AFIS requirements

AFIS, being an integral part of ATS, has been introduced into the EU regulatory framework by Regulation (EC) No 550/2004<sup>9</sup>. With this, AFIS is currently subject to the same general requirements as a full ATS service, including certification/declaration obligations, which may appear disproportionate, especially for small local airfields. At the same time, and as described in Section 3.1.2.2 below in more details, the current EU regulatory framework, referring to ICAO Annex 10 Volume II and Annex 11, does not include explicit and specific requirements for the provision of AFIS, for which Member States have developed national models with very different characteristics. Taking into account the above-mentioned deficiencies, as well as identified safety issues, the Agency aims at providing clearer and more proportionate rules for the provisions of AFIS within the scope of ATS and at harmonising, to an adequate extent, this type of ATS throughout the EU. In addition, it is clarified that not every aerodrome operation, particularly at the smaller end, is subject to ATS/AFIS and related provisions.

Therefore, a set of provisions which better define and explicitly address AFIS, and which delineate the common mandatory elements of this service, is proposed. These provisions are built upon the ICAO FIS principles, applied and adapted, as necessary, to the aerodrome context. The proposal was developed also on the basis of the outcome of the EASA AFIS Survey (see Section 3.1.2.3 below), issued by the Agency in 2015, to which stakeholders from the very large part of EASA Member States responded.

With the approach adopted, it is made clear that, except when dictated otherwise, or when flexibility is explicitly allowed in the provisions, requirements addressed to ATS providers are intended to include also the AFIS providers, subject to conditions established for their certification or declaration. Moreover, the proposed provisions explicitly indicate the applicability of technical requirements, where appropriate, to the AFIS unit, when the originating ICAO provisions were only considering ATC units and/or flight information centres (FICs).

In order to ensure proportionality and to avert negative impacts on local and, in particular, General Aviation activities at small airfields, GM is proposed describing that States may also allow the operation of aeronautical stations/facilities other than ATS units at selected aerodromes. These units, named UNICOM stations, are not intended to provide ATS, but to facilitate aviation activities. Such type of facilities are commonly found across the EU and varyingly they are referred to as 'Air-Ground' radio, 'Flugleiter' or by some other name, though providing a facility that has some similarities with AFIS, but is not guaranteed by common ATS standards and is often provided by non-professional staff. The definition of requirements for these UNICOM stations, if considered appropriate at all, is left to the initiative of the Member States as such stations are not included in the scope of ATS.

**Assuming that smaller airfields would be addressed in the UNICOM way detailed above — hence not be subject to the AFIS rules at stake — and given the wide variety of sizes of the actual AFIS aerodromes and their operation, the Agency recognises the importance of ensuring the highest most**

<sup>9</sup> Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation) (OJ L 96, 31.3.2004, p. 10) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1467113381244&uri=CELEX:32004R0550>).



adequate level of proportionality and value added through the future rules on AFIS. In this light, it is particularly important for the Agency to receive feedback on this subject through the consultation of this NPA.

Therefore, the Agency kindly invites its stakeholders to clearly indicate, as appropriate, the need as well as the ways to potentially add further clarity to the proposed AFIS requirements and enhance their level of proportionality.

In addition to the lack of uniformity in the respective responsibilities of pilots and AFIS officers in different States, the lack of common phraseology has been an issue affecting the safety and appropriateness of operations at AFIS aerodromes, serving also international traffic. It was therefore considered that the explicit inclusion of common air-ground phraseologies supporting the provision of AFIS would be beneficial. As air-ground ATS phraseology is located in the SERA Regulation, the Agency will ensure that such specific phraseology is developed under the rules maintenance mechanism for the SERA Regulation during 2016–2017, based on existing ICAO phraseology, the Eurocontrol AFIS manual and national AFIS phraseologies.

In the absence of an explicit regulatory mandate in the Basic Regulation, this proposal does not include a set of provisions addressing the qualification and training of AFIS officers. It should be kept in mind that ATM/ANS.OR.B.005 'Management system' in Annex II to the ATM/ANS Common Requirements Regulation stipulates that providers (and therefore also AFIS providers) shall ensure that their personnel are trained and competent to perform their duties in a safe, efficient, continuous and sustainable manner. The establishment of explicit AFIS requirements is considered as an enabler for the harmonisation of AFIS training and qualification schemes, which themselves will help maintain flexibility taking into account the local characteristics of such service provision. Within its activities concerning the consideration of human performance in the context of ATM/ANS, the Agency will further carefully evaluate whether any specific and detailed EU regulation is necessary.

## 2.7. Overview of the proposed amendments

This NPA puts forward amendments to:

- the ATM/ANS Common Requirements Regulation and the Annexes thereto, and more specifically to:
  - the recitals and articles;
  - Annex I 'Definitions';
  - Annex IV 'PART-ATS'; and
  - Annex V 'PART-MET';
- the SERA Regulation, and more specifically to:
  - the recitals thereof;
  - definition 57. of 'controlled aerodrome'; and
  - the Annex thereto, and more specifically:
    - SERA.8005;
    - SERA.8012;



- SERA.8015;
  - SERA.9005; and
  - SERA.14095;
- the upcoming ED Decision issuing AMC/GM to the ATM/ANS Common Requirements Regulation; and
  - ED Decision 2013/013/R (AMC/GM to the SERA Regulation), by introducing relevant GM.

### 2.7.1. Amendments to the ATM/ANS Common Requirements Regulation and to the upcoming ED Decision issuing the related AMC/GM

This section contains the explanatory notes concerning the IRs amending the ATM/ANS Common Requirements Regulation, which are included in Section 1.1 of NPA 2016-09(B), and more specifically:

- a recital and general requirements (three new articles) applicable to Member States;
- definitions relevant to the provision of ATS, transposed within Annex I;
- specific organisation requirements for ATS providers, transposed within Section 1 in addition to the already existing requirements and within the newly established Sections 4 and 5 of Subpart A of Annex IV;
- technical requirements for ATS providers, transposed within Subpart B of Annex IV by repealing the current content of Section 1 and by replacing it with 4 Sections, as follows:
  - Section 1 — General
  - Section 2 — Air traffic control service
  - Section 3 — Flight information service
  - Section 4 — Alerting service
- amendments to MET.OR.242 ‘Information to be provided to air traffic services units’ and MET.OR.245 ‘Meteorological watch and other information’ included in Annex V ‘Part-MET’.

This Section also integrates the explanatory notes for the AMC and GM to the IRs described above; such AMC and GM are included in Section 1.3 of NPA 2016-09(B).

#### 2.7.1.1. Amendments to the Regulation

The Agency proposes the introduction of a recital which underlines the need to consider the strong interrelation and complementarity between the requirements in the SERA Regulation and those in PART-ATS.

The analysis of Chapter 2 of Annex 11 led to the identification of ATS provisions according to which, even in the EU regulatory context, the responsibility is to be allocated to the Member States, as said provisions envisage the involvement of entities which are not under the scope of the Basic Regulation (e.g. the military); therefore, these provisions are proposed for transposition as articles of the ATM/ANS Common Requirements Regulation.

Article 3(1b), resulting from the transposition of Section 2.4 of Annex 11, stipulates that the responsibility for determining the need for the provision of ATS lies with the Member States, and



indicates the factors which need to be taken into account in determining that. It clarifies that the need for the provision of ATS is to be determined regardless of the carriage of ACAS system by aircraft.

GM1 to Article 3(1b) better describes such factors; it is derived from the Note to Section 2.4.1 of Annex 11 and further complemented by additional elements identified by the Agency.

GM2 to Article 3(1b) pertains to the possibility for Member States to allow the facilitation of aviation operations at those aerodromes where the provision of ATS has not been determined as necessary at any time. In this case, aeronautical stations named UNICOM, may be established under specific conditions prescribed by the Member States. These UNICOM, which are not to be considered as units providing any ATS and therefore are not subject to the EU ATS regulatory framework, may operate in airspace designated for the provision of FIS, but only where the obligation for two-way radio communication with the responsible FIC is not established.

Article 3(1c), which transposes the content of Section 2.17.3.2 of Annex 11, requires the Member States to warrant that particular procedures are established between military entities and the ATS with regard to the information exchange on aircraft potentially subject to an interception. These procedures have to be designed with the purpose of minimising the need for interception and of assisting aircraft as necessary. The provision is closely linked with provisions ATS.OR.115 and ATS.TR.120, transposed from the same section of Annex 11 and establishing the requirements enabling the prompt communication between ATS units and relevant military entities, allowing the required flow of flight plan information and flight data for identification purposes.

Article 3(1d) concerns the coordination of activities which could potentially prove hazardous to the civil traffic, including but not limited to those activities that may be undertaken by the military. The provision, which is an adapted transposition of Sections 2.18.1 and 2.18.3 on Annex 11, requires the Member States to establish arrangements between all affected parties, including the ATS providers, for the timely coordination of such activities and for their notification to all concerned. In accordance with the principle established in Article 1(3) of Regulation (EU) No 551/2004<sup>10</sup>, the article clarifies that the arrangements for the coordination and the notification of this type of activities, when taking place within the airspace over the high seas, shall be established by the Member State which has accepted the responsibility to provide ATS therein.

GM2 to Article 3(1d) refers to ICAO Doc 9554 'Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations', including detailed guidance on the coordination subject to the provision.

Point (c) of Article 3(1d), transposed from Section 2.18.5 of Annex 11, requires the Member States to undertake appropriate actions to prevent any negative effect of laser beam emissions on the flight operations. This is a safety issue for which there is evidence of an increase of occurrence reports. The Agency proposes to allocate the responsibility for action to the Member States because of the nature of the original ICAO provision, which is not specifically attributed to service providers or any other

<sup>10</sup> Regulation (EC) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organisation and use of the airspace in the single European sky (the airspace Regulation) (OJ L 96, 31.3.2004, p. 20) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1465287212157&uri=CELEX:32004R0551>).



regulated entity. It is to be noted that Article 9(c) of Regulation (EU) No 139/2014<sup>11</sup> requires the Member States to ensure that ‘consultations are conducted with regard to human activities and land use such as (...). (...) the use of hazardous, confusing and misleading lights’, including lasers. Such requirement, however, does not seem to fully address the safety issue in question and the relevant ICAO provisions. **In this light, in order to determine the best course of action, the Agency invites its stakeholders to:**

- **comment on the need to include this provision in the EU regulatory framework;**
- **in case the proposal is considered to be appropriate and necessary, comment as to whether the ATM/ANS Common Requirements Regulation is the most appropriate place to include such requirement, or if it should be included in a different regulation (existing or future); and**
- **provide information on the arrangements at State level, in particular as regards the allocation of responsibilities.**

#### 2.7.1.2. Amendments to Annex I — Definitions

In order to clarify the meaning of the various terms related to PART-ATS introduced by this NPA in the ATM/ANS Common Requirements Regulation, it is proposed to amend Annex I thereto to include the necessary definitions.

The proposed definitions, selected from the relevant ICAO Annexes (mainly Annex 11) and from PANS ATM, are fully consistent, with the exception of the definition of ‘controlled aerodrome’, with the definitions set in the SERA Regulation and in its successive amendments introduced with Regulation (EU) 2016/1185, as well as with definitions and requirements included in the ATM/ANS Common Requirements Regulation, of which they will become integral part.

For a number of definitions and when deemed appropriate, GM is proposed for better clarification, derived from the notes associated with the ICAO definitions from which they are transposed.

The Agency proposes a definition of ‘controlled aerodrome’ which is different from that in the SERA Regulation. The definition aims to adhere to the principle laid down in Article 8.1 of Regulation (EC) No 550/2004, stipulating: ‘Member States shall ensure the provision of air traffic services on an exclusive basis within specific airspace blocks in respect of the airspace under their responsibility. For this purpose, Member States shall designate an air traffic service provider holding a valid certificate in the Community’. This principle is implemented in the regulatory proposals for PART-ATS (in this NPA) and the forthcoming NPA on Part-ASD to be published in the course of 2016 in the context of the regulatory activities of RMT.0445.

With this proposed amendment, it is clarified that in presence of an aerodrome where ATS is provided, including controlled aerodromes, it is expected to have at all times an associated airspace and the designation of a provider in charge of rendering the services.

The necessity for designating the airspace around a controlled aerodrome derives also from the definition of ‘aerodrome traffic’ in the SERA Regulation (and proposed with this NPA for inclusion in Annex I to the ATM/ANS Common Requirements Regulation) to which ATC service is provided at

<sup>11</sup> 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) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1465287446104&uri=CELEX:32014R0139>).



controlled aerodromes. Aerodrome traffic is defined as ‘all traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome. An aircraft operating in the vicinity of an aerodrome includes but is not limited to aircraft entering or leaving an aerodrome traffic circuit’.

The proposed definition of ‘controlled aerodrome’ reinstates adherence to the original ICAO Annex 11 definition but disregards the associated Note. Such Note, while allowing for flexibility in the decision to designate a control zone associated with a controlled aerodrome, is not consistent with the aforementioned principle of Regulation (EC) No 550/2004.

Consequently, it is proposed to amend the definition of ‘controlled aerodrome’ as in point 57. of Article 2 of the SERA Regulation, accordingly.

In addition, the Agency proposes to amend the definition of ‘aerodrome flight information service’ established in point 6. of Annex I to the ATM/ANS Common Requirements Regulation. The new definition, which does not contradict the existing, clarifies that AFIS is a service which is to be delivered by a provider designated in accordance with the relevant Single European Sky legislation. The associated GM explains the difference between AFIS, which is integral part of ATS and which is to be provided in accordance with the applicable EU legislation, and UNICOM, which is not under the ATS scope and therefore requires neither certification nor designation, and may be established on the basis of national rules.

### 2.7.1.3. Amendments to Annex IV — Subpart A ‘Additional organisation requirements for providers of ATS’

The amendments proposed to Subpart A of Annex IV complement the existing provisions in Section 1 ‘General requirements’ and establish the new Sections 4 ‘Requirements for communications’ and 5 ‘Requirements for Information’. These organisation requirements are applicable to all ATS providers, including AFIS providers, except when flexibility is explicitly allowed or when the provisions address the provider of a specific ATS (e.g. ATC).

#### 2.7.1.3.1. Section 1 — General requirements

ATS.OR.110 requires the providers of ATS at aerodromes to establish arrangements with the operators of those aerodromes to define and coordinate the respective responsibilities and procedures concerning the services provided, as well as to set the necessary information and data exchange. This provision mirrors the corresponding requirement ADR.OR.C.005(b)(1) in Regulation (EU) No 139/2014 addressing the aerodrome operator. A set of AMC is proposed to address in detail the most important aspects to be defined by these arrangements, in particular the establishment of identification of standard taxi routes (in AMC1 ATS.OR.110), the coordination for low visibility operations (in AMC3 ATS.OR.110), and the exchange of information on the safe use of the manoeuvring area (in AMC6 ATS.OR.110) which could lead to the closure of operations on parts of such area. AMC3 ATS.OR.110 addresses the coordination with the provider(s) of apron management services, by establishing the elements which are to be coordinated. This AMC mirrors the content of the draft provision ADR.OPS.D.020, within the requirements for apron management services published with Opinion 02/2014<sup>12</sup>, which proposes the amendment of Regulation (EU) No 139/2014. This Opinion is currently under the comitology process.

<sup>12</sup> <http://www.easa.europa.eu/document-library/opinions/opinion-022014>





ATS.OR.115, which transposes part of the content of Section 2.17.3.1 of Annex 11, is to be read in relation to Article 3(1c) and to ATS.TR.120; it establishes the obligation for the ATS providers, with the related conditions, to ensure that information on the flight plans and the flight data possessed by ATS units under their responsibility are made available to the relevant military entities, to facilitate the identification of aircraft.

In order to ensure that they deliver services which meet the applicable requirements, ATM/ANS.OR.B.005(f) in Annex III requires the ATS providers to establish formal interfaces with the providers of other relevant services. This requirement covers, inter alia, the obligation for the ATS provider to establish a formal agreement with the providers of meteorological services for the provision of meteorological information and products. While the provision of meteorological information to ATS units is addressed in Annex V (Part-MET), as well as in Section 5 'Requirements for information' of Subpart A, ATS.OR.120, which transposes the content of Section 2.20 of Annex 11, requires the ATS provider to establish arrangements allowing ATS personnel to report to the relevant meteorological service provider specific meteorological information or elements. Such information or elements could be directly observed by ATS personnel or reported to ATS units by aircraft. Particular emphasis is drawn to the necessary coordination between ATS and meteorological services to ensure consistency as regards the issue of messages concerning volcanic ash.

ATS.OR.125 has to be read in the context of the requirements proposed by the Agency with NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'<sup>13</sup>. It transposes the principle in Section 2.1.4 of Annex 11, and establishes the obligation for ATS providers to make available to the relevant aeronautical information services (AIS) provider the aeronautical information concerning the services under their responsibility. It further details the elements of information which have to be timely reported, replicating those in Section 2.21.1 of Annex 11, and requires the ATS providers to appropriately coordinate with the AIS provider for the timely provision and promulgation of information concerning changes to the air navigation system for which they are responsible, before such changes are introduced.

GM2 ATS.OR.125(a) indicates that the set of information concerning AFIS provision and the processes for the delivery of such information to the AIS provider are identical to those established for aerodrome ATC service.

GM3 ATS.OR.125(a) proposes that information regarding the availability of UNICOM, even though such stations are not providing ATS, are also published in the appropriate section of the AIP, and lists the elements of information concerned.

ATS.OR.130, established on the basis of the provisions in Section 2.25 of Annex 11, addresses the time in the provision of ATS and has to be read in conjunction with SERA.3401 of the SERA Regulation. It specifies the time-related information to be displayed at ATS units, and the location of the clocks indicating the time within the ATS operational rooms. Detailed rules are provided as far as the check of the clocks are concerned, in order to ensure that this information is accurate and aligned as much as possible amongst all ATS units. For this purpose, it is required that the correct timing for the clocks' checks is obtained from a standard time station, or from another unit which obtained the check from such a station.

<sup>13</sup> <https://www.easa.europa.eu/document-library/notices-of-proposed-amendment/npa-2016-02>



The general requirement for ATM/ANS providers to develop contingency plans in the case of events which result in significant degradation or interruption of their operations is established in ATM/ANS.OR.A.070 of Annex III. ATS.OR.135 adheres to this principle but, responding to the provisions in Section 2.30 of Annex 11, stipulates that ATS providers develop such plans in close coordination with neighbouring ATS providers and with the airspace users concerned. With GM1 ATS.OR.135, the Agency reproduces the consideration as in Section 15.6 of PANS ATM about the fact that detailed procedures for the various types of contingencies could not be developed, as any contingency may develop subject to a number of circumstances which would make it unique. However, following the analysis of ICAO documents, the Agency proposes guidance on specific types of contingencies. GM2 ATS.OR.135, transposed from Sections 8.8.6 and 15.6.1 of PANS ATM, indicates actions to be undertaken for radiocommunication contingencies in ATC provision, while GM3 ATS.OR.135 includes guidance for ATS units in case of reported or forecast volcanic ash cloud.

The general requirement for ATM/ANS providers to report to the competent authority and to the organisation responsible for the design of system and constituents, any malfunction, technical defect, exceedance of technical limitations, occurrence, or other irregular circumstance that has or may have endangered the safety of services is set in ATM/ANS.OR.A.070(b) of Annex III, for occurrence investigation purposes. ATS.OR.140 aims at the quick mitigation of malfunctions of communication, navigation and surveillance systems which may impact the safety and efficiency of flights. For this purpose, the ATS providers shall establish arrangements through which the units under their responsibility have to notify without delay such malfunctions, so that appropriate action can be undertaken. This provision, transposed from Section 4.14 of PANS ATM, was originally addressing only ATC units; by virtue of the potential safety impact of a failure of communication, navigation and surveillance systems on the services provided by FIC and AFIS units, the Agency proposes to extend its applicability to all ATS units.

ATS.OR.145 concerns specific organisation requirements related to the provision of ATC. Point (a), transposed from Section 3.3.2 of Annex 11, requires that all the relevant information and control data concerned with the progress of flights are adequately displayed to controllers, to accomplish the respective tasks. AMC1 ATS.OR.145(a), including selected provisions from PANS ATM Sections 4.13.2 and 4.13.3, defines the sort of information and the arrangements necessary to enable the controllers to have a complete and up-to-date representation of the traffic situation and of the airspace, or the aerodrome, within which they are responsible to provide services. GM2 ATS.OR.145 further details additional categories of information the availability of which to controllers is considered desirable. Point (b) requires the providers to join and contribute to the European Reduced Vertical Separation Minima (RVSM) Monitoring programme, led by the established European Regional Monitoring Agency, as stipulated under Section 3.3.5.1 of Annex 11.

ATS.OR.150, which is to be read in conjunction with ATS.TR.230, also addresses only providers of ATC service, which are required to establish in letters of agreement and operation manuals, as appropriate, the procedures for the coordination and transfer of responsibility for controlled flights as well as for the transfer of air-ground communications of aircraft. GM1 ATS.OR.150(b), derived from Section 10.1.2.4 of PANS ATM, proposes additional details to be taken into considerations when establishing procedures for transfer of air-ground communication both in presence and in absence of ATS surveillance systems, as well as when a third unit is involved.



#### 2.7.1.3.2. Section 4 — Requirements for communications

This section, which is based primarily on the transposition of Standards from Chapter 6 of ICAO Annex 11, includes organisation requirements for ATS providers concerning the aeronautical mobile (air–ground) and the aeronautical fixed (ground–ground) services, as well as the communications of units providing aerodrome control service with vehicles on the manoeuvring area. It also defines the ATS providers' responsibilities for the automatic recording of air–ground communications, ground–ground communications and surveillance data. It addresses the retention of such records of communication, data and other control data and documentation.

ATS.OR.400, transposed from Section 6.1.1.1 of Annex 11, establishes the general principles for the provision of the aeronautical mobile service, which is the communication between the aircraft and ATS units. The ATS provider is required to use voice or data link, or a combination of them, for air–ground communications. The term 'radiotelephony' used by the original ICAO provision is replaced by the term 'voice' for consistency with provisions in Section 6 of the SERA Regulation, and in particular with SERA.6001. Point (c), transposing Section 6.1.1.3 of Annex 11, requires the provider to record all communications for the purpose of ATC provision. Additionally, in consideration of the relevance of such communication records for occurrence investigation purposes, and in line with the scope of Regulation (EU) No 376/2014<sup>14</sup> which includes ATM/ANS-related occurrences, with point (d) the Agency proposes to expand the application of this requirement to FIS and AFIS provision, at the discretion of the competent authority. By virtue of the fundamental importance of the two-way air–ground communication in the provision of ATS surveillance service, point (b), transposed from Section 8.3.1 of PANS ATM, sets the level of availability, reliability and redundancy of the communication systems when such ATS is provided.

ATS.OR.405 point (a), transposed from Section 4.1.3.1.1 of Annex 10 Volume V, addresses the utilisation of the VHF emergency channel. As explained in Section 2.7.2, it is proposed to introduce the same requirement also in the SERA Regulation by amending SERA.14095. ATS.OR.405 point (b), from Section 4.1.3.1.1 of Annex 10 Volume V, indicates the ATS units at which the VHF emergency channel has to be made available; it is left to the competent authority to mandate the availability of the said channel at additional locations, such as AFIS units, when considered appropriate. GM is provided to better specify the use of such channel, including the reference to requirements for the continuous watch of the VHF emergency channel (in SERA.14080(b)).

Based on the general principles as in ATS.OR.400, provisions ATS.OR.410, ATS.OR.415, ATS.OR.420 and ATS.OR.425, transposed from Section 6.1 of Annex 11, establish the specific requirements for the aeronautical mobile service for the various ATS units with the related main technical characteristics.

While the original provision in Section 6.1.2.1 of Annex 11 prescribes the establishment of radio coverage anywhere within the flight information region (FIR) for the purposes of FIS, with ATS.OR.410 point (a), in recognition of the objective limitations which may be encountered to respond to such requirement, as for instance the impossibility to establish full radio coverage due to the orography of the territory, the Agency proposes that such radio coverage is ensured to 'the practical extent' and under the conditions prescribed by the competent authority. The Agency

<sup>14</sup> Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (OJ L 122, 24.4.2014, p. 18) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1465291216361&uri=CELEX:32014R0376>).



advises to apply the given flexibility only when necessary, and keeping in mind the imperative need to ensure the availability of the aeronautical mobile service as a necessary means for the provision of FIS.

ATS.OR.410 point (b) introduces the novelty of explicit requirements on the aeronautical mobile service for AFIS units. With the same flexibility established for FIS in point (a), the provider is required to ensure the air–ground communication between the AFIS unit and aircraft within the airspace associated with the AFIS aerodrome.

ATS.OR.430 establishes the general requirements for the aeronautical fixed service, which supports the communications between ground-based units and/or entities involved for the purpose of ATS provision. Point (a), transposed from Section 6.2.1.1 of Annex 11, determines that such service is to be provided by means of direct speech and/or via data link communications, while point (b), which originates from Section 10.1.6 of PANS ATM and focuses on a specific safety issue, requires that failures of automated coordination systems established at ATC units for the coordination of flights are clearly displayed to the ATCOs, so that they may apply alternative methods, as indicated in the related GM1 ATS.OR.430(b).

ATS.OR.435, transposed almost entirely from Sections 6.2.1 and 6.2.2 of Annex 11, describes in detail and mandates the communication facilities to be established between the various ATS units, including the relevant air traffic services reporting offices, within an FIR, as well as the communication facilities with other units or entities to which the ATS units have to timely and efficiently provide services under their responsibility or to fulfil other tasks assigned. Such units or entities include inter alia the military units in charge of identification and interception of aircraft, meteorological offices, rescue and emergency services. In addition to the original ICAO text, the requirement explicitly indicates when such communication facilities have to be made available and used at AFIS units. ATS.OR.435 point (c) describes the mandatory characteristics and capabilities of the communication facilities and identifies those whose communication shall be recorded. In particular, point (c)(4) merges the content of Sections 6.2.2.3.5 and 6.2.2.3.6 and dictates that the specified communication facilities, made available at approach control units, aerodrome control towers and AFIS units for communication within the FIR, have direct speech capabilities for conference communications. The facilities shall enable the establishment of communications within 15 seconds. In recognition of the technological state of the art, GM1 ATS.OR.435(c)(4) clarifies that such facilities may be other than point-to-point telephone lines.

ATS.OR.440, transposed almost entirely from Section 6.2.3 of Annex 11, relates to the establishment of communication between ATS units providing services in neighbouring FIRs. The provision addresses in detail the establishment, characteristics and capabilities of the facilities enabling communications between adjacent area control centres (ACCs) and FICs, as well as other ATS units when their location and the specific operational context necessitate the availability of reliable and efficient connectivity. For all the communication facilities addressed by this provision, recording is required.

ATS.OR.445, originating from Section 6.2.4 of Annex 11, requires the ATS provider to establish procedures for the appropriate use of the direct speech communication facilities when circumstances so require for the sake of safety of aircraft.



ATS.OR.450, transposed from Section 6.3.1 of Annex 11, has to be read in the context defined in ATS.OR.110, and mandates the ATS providers to make available to the aerodrome control towers two-way voice communication facilities for the control of vehicles on the manoeuvring area, or in alternative, to establish a communication system with such vehicles based on visual sign, if considered adequate to the local operational environment. When appropriate, such two-way voice communications are to be undertaken making use of ad hoc channels, which shall be provided with recording facilities. AMC1 ATS.OR.450(a), which transposes Sections 7.6.3.2.3.2 and 7.6.3.2.3.3 of PANS ATM, establishes a standard communication system based on visual light signals, which can be used also in case of failure of voice communication facilities. GM1 ATS.OR.450(a), transposed from Section 7.6.3.2.3.1, indicates the need to ensure that vehicles operating on the manoeuvring area are provided with adequate voice communication capability with the aerodrome control tower unless specific arrangements allow them to operate without. This provision seems to address the aerodrome operator and not the ATS provider; however in the absence of a similar requirement within the EU aerodrome requirements (Regulation (EU) No 139/2014), it is proposed for consideration of the ATS providers, in the context defined in ATS.OR.110.

ATS.OR.455, transposed from Section 6.4.1.1 of Annex 11, requires the ATS providers to ensure that surveillance data used for the provision of ATS under their responsibility is recorded, as it may prove fundamental for different purposes, and in particular occurrence investigation and search and rescue.

ATS.OR.460 establishes the obligation for the ATS provider concerning the retaining of records of communications and data described in various provisions of Subpart A Section 4, as well as of paper and electronic flight strips and coordination data, as detailed in ICAO documents in various instances, in particular in Chapter 6 of Annex 11. All these records have to be retained for a minimum of 30 days, except when they relate to occurrences. In this case, they have to be retained for the period necessary to fulfil the actions concerned with the investigation of such occurrences.

ATS.OR.465, originating from the recommended practice in Section 3.3.3 of Annex 11, requires the providers of air traffic control service to install systems which allow the recording of background communication and the aural environment at ATCO work stations; such systems should be capable of retaining the records during at least the last 24 hours of operations. This requirement stemmed from Safety Recommendation No 09/2004 of the Investigation Report AX001-1-2/02 published by the German Federal Bureau of Aircraft Accidents Investigation (BFU) in May 2004 regarding the mid-air collision between a Boeing 757-200 and a Tupolev TU154M on 1 July 2002 near Überlingen, Germany. ICAO does not provide guidance on the scope and implementation of this requirement, and evidence gathered by the Agency with the contribution of the RMG.0464 members suggests that the majority of the EU Member States has not yet implemented this provision, and that even when they have, there is a great diversity in the way it is implemented.

**Therefore, the Agency invites the stakeholders to comment on the transposition of this recommended practice as proposed in ATS.OR.465, in particular with regard to:**

- **the appropriateness of this requirement to the current operational environment at EU ATC units;**
- **the need to extend the application of this requirement to all ATS units;**



- **the consideration about the fact that costs for the fulfilment of such requirement could override the expected benefits in terms of safety; and**
- **the need to explicitly limit the requirement for the use of such recordings only for occurrence investigation purposes.**

#### 2.7.1.3.3. Section 5 — Requirements for information

This section proposes organisation requirements for ATS providers concerning meteorological information, information on aerodrome conditions and operational status of navigation aids, whose knowledge by an ATS unit is essential for the purpose of supporting the provision of the FIS.

This kind of information represents a part of all the relevant information supplied by FICs, ATC units and AFIS units to the aircraft, so as to contribute to the safe and efficient conduct of flights.

By nature, this information needs to be obtained by the ATS provider after coordination with the appropriate stakeholders, so several organisation requirements are proposed to ensure its subsequent availability and use by the ATS units.

In achieving a consistent approach with ICAO, the following requirements and their associated GM are based on applicable SARPs currently published in Chapter 7 of ICAO Annex 11. The formulation of the requirements was amended to underline that the responsibility to ensure the supply of meteorological information rests with the ATS provider.

ATS.OR.500, based on Sections 7.1.1.1 and 7.1.1.2 of Annex 11, is concerned with the supply of up-to-date information on existing and forecast meteorological conditions that needs to be made available to ATS units in order to support the performance of their functions. In particular, it addresses the need for detailed information on meteorological phenomena taking place in the vicinity of the aerodrome that could adversely affect aircraft, e.g. approach and departure operations. It also emphasises the importance of the form and frequency, by which the information is presented to the ATS personnel.

ATS.OR.505, transposed from Sections 7.1.2.1 and 7.1.2.2 of Annex 11, addresses the supply of information stipulated in MET.OR.245(f) and (g) for FICs and ACCs concerning the airspace when such units are designated to provide ATS, underlining the need to make available information related to weather deterioration as soon as it can be observed or anticipated by the associated meteorological watch office. The provision of meteorological information concerning other airspaces not under the responsibilities of such ATS units may be prescribed by the competent authority. It also requires a regular provision of pressure data for setting altimeters for specific locations indicated by the FIC or ACC concerned. GM1 ATS.OR.505(a), transposed from Note to Section 7.1.2.1 of Annex 11, explains why changes in weather conditions should be evaluated in the aviation context, so as to anticipate any adverse impact on aircraft operations.

ATS.OR.510, originating from Sections 7.1.3.1, 7.1.3.2, 7.1.3.3, 7.1.3.4, 7.1.3.5 and 7.1.3.6 of Annex 11, requires the supply of information considered in MET.OR.242(b) for an approach control unit through its associated aerodrome meteorological office, as well as the necessary updates in accordance with established criteria. In addition, it regulates a number of meteorological inputs that need to be displayed and monitored at an approach control unit, like wind speed associated with runways or their sections and pressure data for setting altimeters for specific locations. Besides, units providing services for final approach, landing and take-off are required to display surface wind data,



runway visual range value(s), value(s) of the height of cloud base and wind shear. It is also established which of these data are to be obtained from the same sensors and correspond to the meteorological information displayed in the aerodrome control tower and in the meteorological station, where such a station exists.

ATS.OR.515, transposing Sections 7.1.4.1, 7.1.4.2, 7.1.4.3, 7.1.4.4, 7.1.4.5, 7.1.4.6, and 7.1.4.7 of Annex 11, requires the supply of information considered in MET.OR.242(a) for aerodrome control towers and AFIS units through the associated aerodrome meteorological office, as well as the necessary updates in accordance with established criteria. The proposal includes the explicit reference to the AFIS units as recipient of the supply of meteorological information about the aerodrome, in consideration of the safety relevance of meteorological information for aerodrome operations. Taking account of the specificity of the AFIS provision, discretionary powers are given to the competent authority to allow justified derogations from the provision of information in MET.242(a) to AFIS units. In order to reflect the inclusion of AFIS units in the scope of this provision, this NPA proposes to amend MET.OR.242(b) accordingly, as explained in Section 2.7.1.5 below.

The scope of this requirement is very similar to ATS.OR.510 in relation to meteorological information that needs to be made available to the aerodrome control tower or AFIS unit, like pressure data for setting altimeters for the aerodrome concerned. In a similar way, it regulates the availability of displays, so as to show surface wind data associated with runways or their sections, runway visual range value(s), value(s) of the height of cloud base and wind shear. It also stipulates which of this data is to be obtained from the same sensors and corresponds to the meteorological information displayed in the meteorological station, where such a station exists. Finally, the supply of aerodrome warnings for local meteorological conditions on the aerodrome concerned is required as well.

ATS.OR.520, transposing Section 7.2 of Annex 11, establishes the obligation for the ATS provider to duly inform aerodrome control towers, AFIS units and units providing approach control service about the operational conditions of the movement area and of the associated facilities at the aerodrome(s) concerned with the services delivered by these units. The elements of information, established in ADR.OPS.010 and ADR.OPS.015 of Regulation (EU) No 139/2014 is to be made available to the ATS provider by the aerodrome operator concerned, by virtue of the agreement mandated under ATS.OR.110 and better specified by the associated AMC2 ATS.OR.110.

ATS.OR.525, originating from Sections 7.3.1 and 7.3.2 of Annex 11, stipulates the obligation for the ATS provider to ensure that all ATS units, including AFIS units, are duly and timely informed of the operational status of key radio navigation and visual aids within their respective area of responsibility related to take-off, departure, approach and landing procedures, as well as to surface movement. GM1 ATS.OR.525 incorporates ICAO Air Traffic Services Planning Manual (Doc 9426), Part I, Appendix A to Chapter 10, as a valid reference in relation to the provision of information to ATS units with respect to visual and non-visual navigation aids.

#### **2.7.1.4. Amendments to Annex IV — Subpart B ‘Technical requirements for providers of ATS’**

The requirements proposed in this Subpart set the principles of the working methods and operating procedures for the provision of ATS, both at general level (in Section 1 ‘General’) and for each of the services in the scope of ATS (in Sections 2 ‘ATC service’, 3 ‘Flight information service’ and 4 ‘Alerting service’). They are based mainly on the transposition of the relevant Annex 11 and PANS ATM provisions, with the necessary adaptations to the EU regulatory and operational context, and take



also into account the content of ICAO European (EUR) Regional Supplementary Procedures (Doc 7030 EUR) and the feedback obtained from the RMG.0464 Members on existing practices and procedures. With the introduction of a complete and more detailed set of requirements in Subpart B, ATS.TR.100(a) of the ATM/ANS Common Requirements Regulation, which generically addressed ATS providers to establish working methods and operating procedures compliant with the Standards in Annex 10 Volume II and Annex 11, is repealed. The reference to the compliance with the SERA Regulation for the provision of ATS is repealed as well, but the proposed introduction of the recitals referring to the ATM/ANS Common Requirements Regulation and to the SERA Regulation as explained in Sections 2.7.1.1 and 2.7.2 indicates the close interdependency and complementarity of these two sets of rules.

Instead, the specific requirement in ATS.TR.100(b) of the ATM/ANS Common Requirements Regulation addressing the provision of ATS for flight testing is maintained in the newly established provision ATS.TR.165.

#### 2.7.1.4.1. Section 1 — General

The provisions in this section address the fundamentals of the various ATS, including the related objectives, the description of each service, the units in charge, as well as the common technical requirements to be applied by ATS providers, as appropriate.

ATS.TR.100 establishes the objectives to be achieved in the provision of ATS to aircraft. This requirement, originating from Section 2.2 of Annex 11 and transposed also in SERA.7001, is duplicated in PART-ATS in consideration of its relevance in the regulatory context.

ATS.TR.105, which is based on Sections 2.3.1, 2.3.2, and 2.3.3 of Annex 11, institutes the services in the scope of ATS and unambiguously associates them with the achievement of the objectives established in ATS.TR.100. Therefore, ATS comprise ATC service, further detailed into area, approach and aerodrome control service, FIS and Alerting Service. In addition to the original text of Annex 11, paragraph (b) explicitly links the air traffic advisory service, which ICAO defines in Section 9.1.4 of PANS ATM, to FIS. In line with the purpose of this NPA to unequivocally recognise and address AFIS provisions, GM2 ATS.TR.105(b) clarifies that FIS may be provided to traffic operating en-route as well as at aerodromes and its vicinity, thus indicating the two environments for which specific FIS provisions are proposed.

AMC1 ATS.TR.105(b), transposed from Sections 9.1.4.1.1 and 9.1.4.1.2, the latter also being duplicated as AMC1 SERA.6001(h), addresses the implementation of the air traffic advisory service. It stipulates that such information service, which should be implemented only on a temporary basis, may be provided to IFR flights under specified circumstances and within advisory airspace (Class F), when air traffic control service is not deemed to be suitable. GM1 ATS.TR.105(b) is transposed from various textual parts of Sections 9.1.4.1 and 9.4.1.3 of PANS ATM, some of which were also proposed as GM1 SERA.14090(b) with NPA 2015-14. It offers additional details on the objectives, the tasks, the arrangements and the procedures for the provision of the air traffic advisory service, and emphasises the advice-giving nature of this information service. Nonetheless, in consideration of the specific safety-related nature of the service, with AMC2 ATS.TR.105(b), which transposes Section 10.3 of PANS ATM, the ATS units concerned are required to apply the same procedures established for the provision of ATC for the coordination of traffic to which air traffic advisory service is provided.





ATS.TR.110 institutes the various ATS units and describes the services each of them is in charge of providing as well as the associated airspace and area of responsibility. In point (a), transposed from Sections 2.9.1 and 2.9.2 of Annex 11 which originally comprised only the ATC units and the FIC, the Agency proposes to include also the AFIS unit, which is responsible for the provision of FIS and alerting service at specified aerodromes where a Member State deems necessary to provide ATS, but not ATC service.

Point (b), derived from the related definition in PANS ATM, establishes the functions of the ATS reporting office as integral part of ATS. GM1 ATS.TR.110(b), based on the Final Report of the 57<sup>th</sup> meeting of the European Air Navigation Planning Group (EANPG), further elaborates on the suitable set-ups for the implementation of such functions, which does not necessarily envisage establishing a physical office.

ATS.TR.115, derived from Sections 2.11.1 and 2.11.2 of Annex 11 and from Section 5.2.1.7.1 of Annex 10 Volume II, stipulates the criteria for the naming of the various ATS units, including the AFIS units, which were not considered in the aforementioned reference ICAO provisions. GM1 ATS.TR.115 suggests the principles for the naming of UNICOM aeronautical stations, when established in lieu of ATS units as described in Section 2.6.

ATS.TR.120 is transposed from the second sentence in Section 2.17.3.1 of Annex 11; it requires the ATS providers to make sure that ATS units have available all the necessary data and information to fulfil the obligations set in ATS.OR.115 with regard to coordination with military units, for the purposes of the identification of aircraft operating within portions of airspace specified by the competent authority.

ATS.TR.125, transposing Section 2.29.2 of Annex 11, stipulates that the communications between ATS units are to be effected in English language, or in another language agreed between the involved units and/or providers. In consideration of the importance of the effective communication in ATS, the Agency proposes to extend its application to all ATS units, including FIC and AFIS units, while the original ICAO provision was addressed only to ATC units.

Provisions from ATS.TR.130 to ATS.TR.145 establish a comprehensive and coherent set of rules related to altimetry, to the information on vertical position of aircraft and to flight level management by ATS units. ATS.TR.130, derived from Sections 4.10.1.1, 4.10.1.2, and 4.10.1.3 of PANS ATM, defines the criteria to determine and express the vertical position of aircraft in the various phases of flight, specifying when such vertical position has to be expressed in terms of flight levels, altitudes or specified heights. These requirements duplicate the contents of provisions SERA.8015(eb)(1) and (eb)(5), introduced with Regulation (EU) 2016/1185.

ATS.TR.135 requires the ATS units concerned to determine the transition level and defines the criteria to be used for this purpose. In order to be consistent with ATS.TR.130(a), point (a) clarifies that the transition level is to be used in areas where the transition altitude is established, and not 'in the vicinity of aerodrome concerned and, when relevant, the terminal control area (TMA) concerned', as instead indicated in the originating Section 4.10.2.1 of PANS ATM. GM1 ATS.TR.135 points out the need for coordination between ATS units with the purpose of establishing a common transition level for aerodromes located nearby. Point (b) of ATS.TR.135, derived from Section 6.3.1.2 of ICAO Doc 7030 EUR, determines the location of the transition level in respect of the transition altitude with the purpose of allowing their safe simultaneous utilisation. The Agency discussed the



proposal made by a member of RMG.0464 to add the phrase 'a nominal' to the minimum separation value between the given transition altitude and the transition level. The rationale behind this proposal was that if the 'correct' values of 1013.25 hPa for the Standard and 27.3 ft per hPa in calculating the transition level are used, in certain pressure conditions, a whole flight level is lost for the sake of 7 ft (quarter of an hPa). The addition of 'a nominal' would incorporate the 7 ft 'deviation' described above and would allow more flexibility.

**The Agency invites stakeholders to express their views on the subject and to indicate if the addition of the phrase 'a nominal' would be acceptable.**

ATS.TR.140, transposed from Sections 4.10.3.1 and 4.10.3.2 of PANS ATM, addresses the ATC units concerning the determination, the assignment and the provision of information to aircrew on the minimum cruising levels for IFR flights. In consideration of the safety relevance of the requirements in point (b), the Agency proposes to remove the optional nature of the original PANS ATM provision by making the application of this requirement mandatory at all times in the EU context. GM1 ATS.TR.140(b) clarifies the meaning of lowest usable flight level in this context.

ATS.TR.145, which transposes the very large part of Section 4.10.4 of PANS ATM, stipulates the requirements for the ATS units concerning the provision of altimeter setting information, such as the transition level and the QNH and QFE for the various phases of air and ground operations of aircraft. This information includes the necessary elements to determine the lowest usable flight level, where necessary, and for ACCs and FICs the actual or forecast QNH reports for the airspaces under their responsibility and for those adjacent. Finally, it stipulates the criterion to round down the altimeter setting. Points (c), (d), and (e) of ATS.TR.145 are duplicated respectively from SERA.8015(eb)(2), (eb)(3) and (eb)(4). GM2 ATS.TR.145(c), originating from the second sentence of Section 4.10.4.3 of PANS ATM, clarifies that the ATS units may communicate the transition level to aircraft by the use of voice communications, ATIS broadcast or data link.

ATS.TR.150, transposed from Sections 7.13.1 and 7.13.3 of PANS ATM, establishes the requirements concerning the authorities and the circumstances for the total or partial suspension of VFR operation on and in the vicinity of an aerodrome, as well as the procedures to be applied when such suspension is in effect. GM1 ATS.TR.150, derived from Section 7.13.2 of PANS ATM, clarifies the pivotal role of the aerodrome control tower when such suspensions occur.

ATS.TR.155 prescribes the relevant ATS providers to set procedures for the operation of the aeronautical ground lights, regardless of their distance from the aerodrome for which they are concerned. The associated AMC1 ATS.TR.155, transposed from the very large part of Section 7.15 of PANS ATM, addresses in detail the procedures for the operation of the various aeronautical ground lights, which are described in GM1 to such AMC. While the original PANS ATM provisions were addressing only the aerodrome control tower personnel, the text of this AMC extends its applicability to the AFIS unit personnel, when relevant.

ATS.TR.160 establishes the principles for the use of ATS surveillance systems, which in accordance with the related definition transposed in Annex I from PANS ATM include ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft, in the provision of ATS. In this case, such services are referred to as ATS surveillance services. AMC1 ATS.TR.160(a) describes in detail the functions of ATS surveillance systems which can be implemented in the provision of area control, approach control and aerodrome control services, as well as of the FIS, which is intended to



implicitly include also AFIS. The content of this AMC is derived from various Sections of Chapter 8 of PANS ATM. Its point (c), addressing the functions of ATS surveillance systems in the provision of aerodrome control service, contains an amendment to the original PANS ATM provision proposed and approved by ICAO EANPG at its 56<sup>th</sup> meeting held in November 2014, allowing the use, in the European context, of ATS surveillance systems to maintain separation between succeeding aircraft on the same final approach.

Point (b) of ATS.TR.160, transposed from Sections 8.2.2, 8.4.2 and 8.6.8.1 of PANS ATM, requires the ATS providers to ensure that specific arrangements are established to support the provision of ATS surveillance services, such as the continuous update of the surveillance information and particularly of position indications, the definition of the capacity of the services provided in relation of the various situations, the timely availability to controllers of relevant information, particularly those concerning lowest minimum levels, minimum flight altitudes and minimum altitudes to be applied when vectoring. With regard to the determination of these altitudes, in addition to the original PANS ATM text, the requirement stipulates that the necessary temperature corrections have to be applied. In support of the implementation of these requirements, AMC1 ATS.TR.160(b)(1) addresses the ATS provider to establish the criteria to measure distances between position indications, while AMC1 ATS.TR.160(b)(2), transposed from Section 8.4.2 of PANS ATM, indicates the essential factors to be considered by the ATS providers when determining the number of aircraft to which ATS surveillance services can be simultaneously provided.

Point (c) of ATS.TR.160, based on Sections 8.6.2.1.1 and 8.6.2.1.2 of PANS ATM, mandates the establishment and maintenance of the identification of aircraft, for which a definition derived from PANS ATM is provided in Annex I, as an essential requirement for the provision of ATS surveillance services; it also stipulates that when such identification is unintentionally lost, the ATS shall inform without delay the pilot and issue appropriate instructions for the continuation of the flight.

Point (d) of ATS.TR.160 addresses the various operational aspects of ATS surveillance services, for which the ATS providers are required to establish procedures appropriate to the service rendered. The Agency proposes a comprehensive set of AMC and GM, mainly transposed from Chapter 8 of PANS ATM, supporting the implementation of these procedures.

AMC1 ATS.TR.160(d)(1), originating from Sections 8.6.2.1.3, 8.6.2.2, 8.6.2.3.1, 8.6.2.3.2, 8.6.2.4.1, and 8.6.2.5, describes the methods for the identification of aircraft for the various types of surveillance system available, such as ADS-B, SSR and/or MLAT, PSR. The Agency does not deem necessary to propose the use of direction finding bearings, proposed in Section 8.6.2.4.2 of PANS ATM, as a method to establish the identification of aircraft because it does not seem to be a common practice in the EU context. AMC2 ATS.TR.160(d)(1), transposing Section 8.10.2.3 of PANS ATM, describes the methods of identification of aircraft on the ground subject to surface movement control.

AMC3 ATS.TR.160(d)(1), originating from Sections 8.6.3.1 and 8.6.3.2 of PANS ATM, establishes the procedures, and the necessary conditions, to be applied when effecting a transfer of identification of aircraft between units providing ATS surveillance services. GM1 ATS.TR.160(d)(1) provides further explanation on the various methods of transfer proposed.



The three AMC and the associated GM to point (d)(1) of ATS.TR.160 explicitly allow the application of the identification methods by the FIS and AFIS officers, where appropriate, while with the original PANS ATM provisions they could only be applied by ‘the controller’.

AMC1 ATS.TR.160(d)(2), based on Sections 8.6.4.1, 8.6.4.2, and 8.6.4.3 of PANS ATM, stipulates the circumstances and the methods for the communication of position information to aircraft.

AMC1 ATS.TR.160(d)(3), transposing part of Sections 8.6.5.1, 8.6.5.5, and 8.10.1.2 of PANS ATM, institutes the general principles for the establishment of procedures for vectoring aircraft, for which a definition is provided in Annex I, in particular with regard to the information on the objective and the limit of the vector assigned, to the precautions the controllers should apply with regard to the airspace boundaries, to the vectoring in uncontrolled airspace. This AMC also points out that normally special VFR flights are not to be vectored, and details the instructions and information the controller has to issue to the pilot when vectoring is ended. AMC2 ATS.TR.160(d)(3), derived from Sections 8.9.3.2, 8.9.3.3, 8.9.3.4, 8.9.3.6, 8.9.3.7, and 8.9.4.5 of PANS ATM, further specifies the principles to be applied by the approach control units when vectoring aircraft. It is to be noted that the content of point (d) of this AMC addressing vectoring for final approach, originating from Section 8.9.3.6 of PANS ATM, is amended to be aligned with the amendments proposed by ICAO AN-WP/9014. The proposed text of this specific provision also responds to the recommendation made in the EASA Safety Information Bulletin (SIB) 2014-07R1 : Unexpected Autopilot Behaviour on Instrument Landing System (ILS) Approach<sup>15</sup>, as far as vectoring aircraft for the final approach is concerned.

A set of GM to this AMC, mainly transposed from the relevant sections of Section 8.9 of PANS ATM, is proposed to provide detailed guidance for the establishment of procedures which envisage vectoring of aircraft in the approach phases. They relate to:

- vectoring to pilot-interpreted final approach aids (GM1 to AMC2 ATS.TR.160(d)(3));
- vectoring for visual approach (GM2 to AMC2 ATS.TR.160(d)(3));
- procedures for radar approaches (GM3 to AMC2 ATS.TR.160(d)(3)); and
- procedures for surveillance radar approach (GM4 to AMC2 ATS.TR.160(d)(3)).

AMC1 ATS.TR.160(d)(4), derived from Section 8.6.6.1 of PANS ATM, stipulates that the ATS units providing ATS surveillance services, including FIC and AFIS units, should inform aircraft which are observed to depart significantly from their intended flight path and, where necessary, undertake appropriate action.

GM1 ATS.TR.160(d)(5), based on Sections 8.6.9.1 and 8.6.9.2 of PANS ATM, indicates that units providing ATS surveillance services are entitled to timely inform aircraft about detected areas of adverse weather which may impact their intended flight path and, specifically for ATC units, highlights the necessity to evaluate the impact of vectoring to avoid such areas on the intended flight path of aircraft, and to inform the pilots accordingly.

AMC1 ATS.TR.160(d)(6), entirely transposing Section 8.7.4 of PANS ATM, sets the principles and the conditions for the establishment of procedures concerning the transfer of control of aircraft between units providing ATS surveillance services, in order to ensure continuity in the provision of such

<sup>15</sup> <http://ad.easa.europa.eu/ad/2014-07R1>



services. The AMC provides details for both cases when SSR and/or ADS-B and/or MLAT and when primary radar is used. The associated GM1 to AMC1 ATS.TR.160(d)(6), derived from Section 6.2.5.1 of Doc 7030 EUR, clarifies that the procedures specified in the AMC may be applied without systematic use of the bidirectional speech facilities available between the adjacent units concerned, under specified conditions.

AMC1 ATS.TR.160(d)(7), transposed from Section 8.8.4.1 of PANS ATM and applicable only to ATC units, establishes the relevant elements of the procedure to be applied in the event of a complete failure of ATS surveillance systems, in particular with regard to the determination of the position of aircraft and to the establishment of an applicable and appropriate procedural separation. For the latter, GM1 ATS.TR.160(d)(7) indicates the application of the half of the applicable vertical separation minima in terms of flight levels, as an immediate and temporary solution.

In order to provide guidance on the availability and on the use of ATS surveillance-based safety-related alerts and warnings, the Agency proposes the following GM:

- GM1 ATS.TR.160(d)(9), transposed from the recommendation in Section 3.9 of Annex 11, represents the safety significance of building in ATS surveillance systems specific features and functionalities, such as conflict alert, conflict prediction, minimum safe altitude warning and unintentionally duplicated SSR codes.
- GM2 ATS.TR.160(d)(9), based on the content of Note 1 to Section 15.7.2 and of Section 15.7.2.1, describes the purposes of short-term conflict alert (STCA) functions and the elements to be included when developing the related procedures.
- in a similar fashion, GM3 ATS.TR.160(d)(9), based on the content of Note 1 to Section 15.7.4 and of Section 15.7.4.1, addresses the minimum safe altitude warning (MSAW) functions and procedures.

Point (e) of ATS.TR.160, transposed from Section 8.8.2.1 of PANS ATM and already transposed as SERA.7002 with Regulation (EU) 2016/1185, mandates the actions to be undertaken by ATC units when an unknown aircraft is deemed to constitute a collision hazard for an identified and controlled aircraft. In addition, GM1 ATS.TR.160(e), transposed from Section 8.8.2.2 of PANS ATM and proposed as GM2 to SERA.7002(a)(1) with NPA 2015-14, indicates the actions to be undertaken by a unit providing ATS surveillance services in case an identified IFR flight outside controlled airspace is observed to be in a conflicting path with other traffic.

ATS.TR.165 replicates, without any substantial change, the requirements concerning the provision of ATS to flight testing operations previously included in point (b) of ATS.TR.100 in the ATM/ANS Common Requirements Regulation.

#### 2.7.1.4.2. Section 2 — ATC service

This section includes the requirements concerning the provision of ATC service, which, in accordance with the objectives set in points (a), (b) and (c) of ATS.TR.100, is delivered with the purpose of preventing collisions between aircraft in the air and on the manoeuvring area, as well as of expediting and maintaining an orderly flow of air traffic. In consideration of the safety relevance of this service, the proposed IRs are further accompanied by a comprehensive set of AMC and GM mainly, but not exclusively, transposed from PANS ATM. These AMC and GM address with the appropriate level of detail the procedures and the tasks for ATC provision to be applied, as



appropriate, by the provider, the unit or, when so specified, by the ATCOs. The section includes a number of IRs duplicated from SERA, in accordance with the rationale explained in Section 2.5; for these IRs, the related set of AMC and GM proposed with this NPA are not those included in ED Decision 2013/013/R, but are introduced ex novo and concern directly the ATS requirements.

ATS.TR.200, identical to SERA.8001 and transposed from Section 3.1 of Annex 11, establishes the mandatory scope of application of the ATC service, which is to be provided to IFR and VFR flights operating within specified airspace classes as defined by SERA.6001, as well as to all special VFR flights and to all aerodrome traffic operating at controlled aerodromes.

On the basis of the subdivision of the ATC service into area control service, approach control service and aerodrome control service stipulated in ATS.TR.105(a), ATS.TR.205, which is derived from Section 3.2 of Annex 11, determines the units which are entitled to provide each of these services. A certain degree of flexibility is offered with regard to the units authorised to provide area control service and approach control service, subject to specified conditions. AMC1 ATS.TR.205, derived from Section 4.3.1 of PANS ATM, requires the provider to arrange the details of the operational set-up of the ATC unit, including when necessary, the sectorisation and the duties and responsibilities of the various working positions.

AMC1 ATS.TR.205(c), based on Sections 7.1.1.1 and 7.1.1.2 of PANS ATM, elaborates on the functions of the aerodrome control tower for the achievement of the assigned objectives. For this purpose, continuous watch on aircraft, vehicles and persons operating on the manoeuvring area has to be maintained at all times by visual observation, which may be augmented by ATS surveillance systems, where circumstances (e.g. low visibility) so require. With RMT.0624 'Technical requirements for remote tower operations', the Agency aims at establishing a regulatory framework allowing the provision of aerodrome ATS from a remote facility, and no longer from an aerodrome control tower physically located at the aerodrome for which it renders the services. As a result of the work undertaken under RMT.0624, the Agency has already published ED Decision 2015/014/R<sup>16</sup>, including GM concerning inter alia an initial definition of visual observation from a remote location, supported by the synthetic representation of the operational environment to the controllers/AFIS officers. At the moment of the publication of this NPA, the activities for the next phase of RMT.0624 which should further develop the concept and the related requirements for remote aerodrome ATS provision are being initiated. The Agency will ensure that full consistency is maintained between the deliverables of these two regulatory packages.

GM1 ATS.TR.205(c), derived from Sections 7.1.1.3 and 7.1.1.4 of PANS ATM, indicates the working positions which may be established within a aerodrome control tower to fulfil the relevant functions, and addresses the responsibilities of the controllers in case of simultaneous operations on parallel or near-parallel runways.

ATS.TR.210 represents a fundamental requirement in the context of ATC service provision, as it establishes the main tasks and responsibilities of ATC units, including the use of appropriate information for the control of the aircraft subject to the service, the issuance of clearances for separation purposes and the application of horizontal and vertical separation minima. Most of the contents of ATS.TR.210 are duplicated from points (a), (b) and (c) of SERA.8005; however, as a result of the analysis of the ATS-relevant ICAO provisions undertaken under RMT.0464, the proposed IR

<sup>16</sup> <https://www.easa.europa.eu/document-library/agency-decisions/ed-decision-2015014r>



includes some amendments compared to the aforementioned original SERA provisions, for which consequently appropriate modifications are also proposed to ensure full consistency between the two regulatory packages, as explained in Section 2.7.2.

Point (a) of ATS.TR.210, transposed from Section 3.3.1 of Annex 11 and duplicated in SERA.8005(a), prescribes in detail the tasks which the relevant units have to fulfil when providing ATC service. Such tasks concern the gathering, the processing and the use of the relevant information to determine the intended and actual progress of flights and their position in respect to each other's, the issuance of clearances, instructions and information in order to achieve the objectives of the ATC service, as well as the coordination of clearances, when appropriate. The Agency proposes to insert the word 'instructions' to point (a)(3) to reflect the extensive use of ATC instructions as a means to achieve the established ATS objectives, as evident also in the context of PANS ATM, and to amend SERA.8005(a) accordingly.

Due to the nature of this provision, a significant number of associated AMC and GM are proposed, addressing in detail the issuance of clearances, instructions and information in the various contexts of the ATC service provision.

AMC1, AMC2 and AMC3 to ATS.TR.210(a)(3) address the principles and the elements of the procedures concerning the issuance of instructions for the horizontal and vertical speed control of aircraft in the various phases of the flight (en-route, departure, arrival), to be applied when necessary for the achievement of the objectives of the ATC service. A set of related GM is proposed to offer additional details on the application of such procedures. The provisions addressing speed control instructions are transposed from Sections 4.6 and 4.7 of PANS ATM; AMC1 ATS.TR.210(a)(3) includes the requirement introduced with ICAO AN-WP/9014 (Amendment 7 to PANS ATM) as the newly introduced Section 4.6.1.2, specifying that speed control instructions remain in effect until they are explicitly cancelled or amended by the responsible controller.

AMC4 ATS.TR.210(a)(3) and the associated GM1, transposed from the relevant contents of Section 6.5.5 of PANS ATM, address the issuance of clearances and instructions for holding aircraft, when it is known that the flight is subject to delay.

AMC5 ATS.TR.201(a)(3), originating from Sections 6.5.6.1.1 and 6.5.6.1.2 of PANS ATM, defines the criteria for the establishment of the approach sequence, including the specification of particular types of flights which should be afforded priority over the others. It also indicates the operational circumstances and conditions when flights may be cleared for the approach. GM1 to AMC5 ATS.TR.210(a)(3), derived from Sections 6.5.6.2.1 and 6.5.6.2.2 of PANS ATM, offers guidance on the so-called timed approach procedures to be applied in presence of a sequence of multiple arriving aircraft, as well as on the factors to be considered for the establishment of the time interval between successive approaching aircraft, with and without the use of ATS surveillance systems in the provision of ATC.

AMC6 ATS.TR.210(a)(3), transposed from Section 6.5.7 of PANS ATM, addresses the circumstances and the procedures for the issuance and the communication of an expected approach time (EAT) to flights which are expected to be subject to a delay above a specified minimum. The original PANS ATM provision (Section 6.5.7.1) stipulates that the EAT should be determined and communicated to aircraft when the delay is estimated to be of 10 minutes or more, unless otherwise specified by the appropriate authority. As a result of the analysis and the discussions with the RMG.0464, the Agency



proposes to remove the element of flexibility and to maintain the standard 10-minute value, with the objective of standardising this procedure throughout the EU Member States. However, there is evidence that in a few Member States the procedure to determine and communicate the EAT is applied only when there is a delay of 20 minutes or more.

**In consideration of the situation described above, the Agency invites the stakeholders to express their views as to whether the 10-minute value is appropriate and currently in use for the determination of the EAT, or, in case it should be amended, what would be the correct time value to be introduced in AMC6 ATS.TR.210(a)(3).**

As AMC8 ATS.TR.210(a)(3) and its related GM1, originating from Section 6.5.4 of PANS ATM, address the general responsibility for the selection and the communication to aircraft of the instrument approach procedure to be used by arriving aircraft, AMC9 ATS.TR.210(a)(3) establishes the requirements concerning visual approach. This AMC, which is transposed from Sections 6.5.3.1, 6.5.3.3, 6.5.3.4, and from the large part of Section 6.5.3.5 of PANS ATM, establishes:

- the responsibilities of the controller and of the flight crew of an IFR flight in selecting and approving the visual approach;
- the conditions under which a visual approach can be cleared, with particular reference to the ability of the pilot to maintain visual reference with the terrain and to the reported and actual meteorological conditions;
- the application of appropriate separation between the aircraft performing a visual approach and other arriving and/or departing traffic;
- the responsibilities and the conditions with regard to separation between successive visual approaches;
- the controller's actions with regard to the issuance to pilots of a caution of possible wake turbulence, under specified circumstances when aircraft performing successive visual approaches are instructed to maintain own separation.

GM1 to AMC9 ATS.TR.210(a)(3), based on Section 6.5.3.2 of PANS ATM, advises controllers to consider the familiarity of the flight crew with the aerodrome and its surrounding terrain, as well as the prevailing traffic and meteorological conditions, when they have the intention to propose the initiation of a visual approach.

AMC10 ATS.TR.210(a)(3), transposed from Sections 6.6.1, 6.6.4, and 6.6.5 of PANS ATM, establishes the sets of information to be transmitted by the unit providing approach control service to arriving aircraft upon the establishment of initial communication, at the commencement of the final approach and, for specified elements when subject to significant variations or at the sudden occurrence of hazards, during the final approach. The related GM1, which transposes the Note to Section 6.6.4 of PANS ATM and which refers to MET.TR.205(a)(3), clarifies the meaning of 'significant variations' in the context of point (c) of the AMC.

AMC11, derived from Sections 7.4.1.1.1, 7.4.1.1.2, 7.4.1.1.6, and 7.4.1.1.7 of PANS ATM, addresses the establishment and the implementation of start-up time procedures, which should be implemented with the objective of avoiding ground delays and of complying with the applicable ATFM measures.





AMC12 ATS.TR.201(a)(3), transposed from Section 7.4.1.2 of PANST ATM, establishes the set of aerodrome and meteorological information to be transmitted by the relevant ATC units to aircraft on the ground before taxiing and before take-off, as well as prior to entering the traffic circuit or approaching the runway for landing. GM1 to this AMC, based on the note to Section 7.4.1.2.2 of PANS ATM, lists the meteorological phenomena the appearance of which may constitute a significant change to the meteorological information transmitted to aircraft prior to taxiing, which have to be notified to aircraft.

AMC13 and AMC14 to ATS.TR.210(a)(3), transposed from various parts of Section 7.6.3.1 of PANS ATM, concern the principles and procedures for the issuance of clearances, instructions and information for aircraft taxiing on the manoeuvring area, with a specific focus on the procedures to be applied when aircraft are permitted to taxi on a runway in use. GM2 to AMC13 ATS.TR.210(a)(3) considers the entirety of Section 7.6.3.1.4 of PANS ATM to describe the principles of helicopter taxi operations.

AMC16 ATS.TR.210(a)(3) and its associated GM1, transposed from Section 7.4.1.4.1 of PANS ATM, specify the actions the controller should undertake when an effective or a potential runway incursion or a runway obstruction are detected after the issuance of clearances for take-off or landing on the same runway. GM1 to ATS.TR.210(a)(3) clarifies that, in consideration of the safety-critical nature of these situations and of the risks to which an aborted take-off or a late go-around may expose the aircraft, it is a prerogative of the pilot-in-command to exercise their judgement in the given situation and to ultimately act to safeguard the safe conduct of flight in these situations. GM2 to ATS.TR.210(a)(3), which the Agency proposes for transposition from Section 2, Chapter 1, Paragraph 16 of the UK CAP 493 'Manual of Air Traffic Services – Part 1', provides guidance for the circumstances when the controllers have to cancel a take-off clearance previously issued.

AMC17 ATS.TR.210(a)(3), originating from Sections 7.9.3.1, 7.9.3.2, 7.9.3.4, and 7.9.3.5 of PANS ATM, establishes the circumstances and the conditions for the issuance of a take-off clearance to departing aircraft, in particular subject to the assurance of the existence of a suitable separation from other aircraft. Similarly, on the basis of Section 7.10.2 of PANS ATM, AMC18 ATS.TR.210(a)(3) addresses the issuance of landing clearance to arriving aircraft.

AMC19 ATS.TR.210(a)(3), derived from Section 7.7.3.3 of PANS ATM, stipulates that specific categories of flights or aircraft subject to specified problems which could affect their safety should be afforded priority for landing over other traffic. The related GM1 provides additional guidance for controllers for the management of specific situations involving aircraft which may need priority for landing; it also recommends that landing aircraft should normally have priority over departing aircraft, when they all operate from the same runway or from intersecting runways.

AMC20 ATS.TR.210(a)(3) establishes the requirements for procedures on visual departures, and more specifically:

- the responsibilities of the controller and of the flight crew of an IFR flight in selecting and approving the visual departure;
- the applicability of visual departure only during the daytime and under specified meteorological conditions;
- the responsibility of the pilot as regards obstacle clearance;



- the responsibilities of the ATC as regards the issuance of appropriate ATC clearance and the separation between the aircraft concerned and other traffic; and
- the establishment of additional requirements to be agreed between the ATS provider and the operators concerned.

GM1 to AMC20 ATS.TR.210(a)(3) draws the attention on the importance of timely providing the aircraft performing a visual departure with relevant information concerning VFR flights affecting its intended route as well as their penetration into airspace classes E, F or G. These provisions addressing visual departures are transposed from Sections 6.5.4.2, 6.5.4.3 and 6.5.4.4 of ICAO Doc 7030 EUR, as amended by ICAO EANPG/54 – WP/15 of 16.11.12 and EANPG/54 – Flimsy 08 of 04.12.12.

AMC21 ATS.TR.210(a)(3) is developed to respond to the safety recommendation ‘FRAN-2013-045’ issued by the Bureau d’Enquêtes et d’Analyses (BEA) to the Agency in the context of the so-called ASAGA (on Aeroplane State Awareness during Go-Around) Study published in August 2013; it stipulates that controllers should issue the instructions for the missed approach in accordance with the published missed approach procedures, in order to help minimising the workload on the flight deck in such a critical phase of flight. Instructions with modifications to such published procedures should be reduced to the essential minimum and be issued only for safety reasons.

The Agency proposes a number of GM to ATS.TR.210(a)(3) to better describe the issuance of clearances, instructions and information in the operational context of the aerodrome control service. In particular:

- GM1 ATS.TR.210(a)(3), transposed from Sections 7.7.2.1 and 7.7.2.2 of PANS ATM and amended in accordance with the content of ICAO EANPG/56 – WP18 of 12/11/14, which addresses the issuance of clearances in the context of the aerodrome traffic circuit;
- GM2 ATS.TR.201(a)(3) indicates that the controller may require pilots to obtain the ATC permission before turning for any of the legs of the traffic circuit and to report when extending any of such legs, in order to avoid losing visual contact with the runway. On the basis of its applicability to the EU operational context, the Agency decided to propose this provision, originating by ICAO EANPG/56 – WP18 of 12/11/14 but not included in the recent Amendment 7 of PANS ATM;
- GM3 ATS.TR.210(a)(3), based on Sections 7.10.3.1, 7.10.3.2, and 7.10.3.4 of PANS ATM, which provides guidance on the issuance of instructions to aircraft for landing and roll out manoeuvres; and
- GM7 and GM8 to ATS.TR.210(a)(3), derived from Section 7.9.1 of PANS ATM, describing the criteria to establish priority for take-off between aircraft.

Point (b) of ATS.TR.210, transposed from Section 3.3.4 of Annex 11 and duplicated in SERA.8005(b), clarifies the purpose of the ATC clearances with regard to the achievement of separation between aircraft operating in accordance different flight rules (IFR, VFR, special VFR) and within various airspace classes, with the exception of a specific case when aircraft, subject to well defined conditions, may be authorised to maintain own separation from other traffic. AMC1 ATS.TR.210(b) and its associated GM1, transposed from Section 5.9 and the related Notes of PANS ATM, stipulates the elements of the procedure to be applied in this case, and emphasises the responsibilities of the



pilot with regard to the maintenance of visual meteorological conditions, the separation from other traffic and the prevention of collision with terrain when such procedure is applied.

Point (c) of ATS.TR.210 establishes the principles and the criteria for the application by ATC units of a vertical or horizontal separation between aircraft, except in the case of operations on parallel or near-parallel runways or when a reduction of the separation minima in the vicinity of the aerodrome is allowed. For vertical separation, the applicable separation minima are specified in IR; for horizontal separation, which is further subdivided in lateral and longitudinal separation, only the criteria are defined, while the minima in the various circumstances are proposed in several AMC. The provision, originating from Section 3.3.5 of Annex 11, is also transposed as SERA.8005(c) and does not include the requirements concerning the application of composite separation established in point (c) of the original ICAO standard, as it is not considered suitable to the EU context. As a result of the analysis of PANS ATM performed under RMT.0464, the Agency proposes the further development of this provision as follows:

- in the introductory sentence, to explicitly extend the possibility to apply a reduced separation minimum to operations on parallel or near-parallel runways, for which the requirements are proposed in ATS.TR.255, on the basis of the contents of Section 6.7 of PANS ATM; and
- in point (c)(1), to explicitly prohibit the use of geometric height information when establishing and maintaining vertical separation, as required in Section 8.5.5.1.1 PANS ATM. GM3 ATS.TR.210(c)(1) clarifies that such information is that generated by airborne systems, for instance, GPS or radio altimeters.

As explained in Section 2.7.2, the Agency proposes to amend SERA.8005(c) accordingly in order to ensure consistency.

With the purpose of establishing detailed requirements for the application of the given separation methods under the various operational circumstances, the Agency proposes a comprehensive set of AMC and GM to ATS.TR.210(c).

AMC1 ATS.TR.210(c), derived from Sections 15.7.11 and 15.7.1.2 of PANS ATM, prescribes that in the event of an emergency situation which renders impossible the application of any horizontal separation, the ATC units concerned may apply a vertical separation of a half of the prescribed minima. In this case, the flight crew is to be made aware of the situation, of the minima applied and provided with appropriate essential traffic information. GM1 to this AMC clarifies that this emergency measure may be applied, as far as flight level allocation is concerned, also in case of complete failure of the ATS surveillance systems, when they support ATC service provision.

AMC1 ATS.TR.210(c)(1), transposed from Sections 5.5.1 and 5.5.2 of PANS ATM, addresses the principles for the application of procedural separation between aircraft holding in flight and other traffic, in particular with regard to separation between aircraft in adjacent holding patterns and between aircraft holding in flight and other arriving, departing or en-route traffic. It is important to remark that in this context, in accordance with point (b) of AMC2 ATS.TR.210(c)(2), separation minima based on ATS surveillance systems should not be applied between aircraft holding over the same holding fix.

GM1 and GM2 to ATS.TR.210(c)(1), based on Sections 5.3.1, 5.3.4.1 and 5.3.4.1.1 of PANS ATM, provides guidance on the application of the vertical separation to aircraft in the various phases of



their flight, in particular as regards the allocation of different flight levels or altitudes, spaced by the appropriate minimum.

AMC1 ATS.TR.210(c)(2), transposed from Sections 8.7.3.1 and 8.7.3.2 of PANS ATM, prescribes the horizontal separation minima to be applied in the various circumstances when ATC service is provided with the support of ATS surveillance systems. The associated GM1, derived from Sections 8.7.2.3, 8.7.2.4, 8.7.2.5, 8.7.2.6, 8.7.2.7, and 8.7.3.3 of PANS ATM, provides additional details on the application of such separation minima, on the basis of the type of ATS surveillance system available.

GM1 ATS.TR.210(c)(2)(i), originating from Sections 5.4.2.1.1, 5.4.2.1.4, 5.4.2.1.5, and 5.4.2.1.6 of PANS ATM, provides guidance on the application of procedural longitudinal separation to aircraft, for which the related separation minima for the various circumstances are proposed in the following:

- AMC1 ATS.TR.210(c)(2)(i), from Sections 5.4.2.2.1.1 and 5.4.2.2.1.2 of PANS ATM, addressing longitudinal separation minima based on time — aircraft maintaining the same level;
- AMC2 ATS.TR.210(c)(2)(i), from Sections 5.4.2.2.2.1, 5.4.2.2.2.2, and 5.4.2.2.2.3 of PANS ATM, addressing longitudinal separation minima based on time — aircraft climbing or descending;
- AMC3 ATS.TR.210(c)(2)(i), from Sections 5.4.2.3.3.1 and 5.4.2.3.3.2 of PANS ATM, addressing longitudinal separation minima based on distance using distance measuring equipment (DME) and/or GNSS — aircraft at the same cruising level;
- AMC4 ATS.TR.210(c)(2)(i), from Sections 5.4.2.3.4.1 and 5.4.2.3.4.2 of PANS ATM, addressing longitudinal separation minima based on distance using distance measuring equipment (DME) and/or GNSS — aircraft climbing or descending;
- AMC5 ATS.TR.210(c)(2)(i), from Sections 5.4.2.4.3 and 5.4.2.4.4 of PANS ATM, addressing longitudinal separation minima with Mach number technique based on time;
- AMC6 ATS.TR.210(c)(2)(i), from Sections 5.4.2.5.2, 5.4.2.5.5, and 5.4.2.5.7 of PANS ATM, addressing longitudinal separation minima with Mach number technique based on distance using RNAV, for the application of which additional explanatory material is provided in the related GM1, transposed from the relevant content of Section 5.4.2.5 of PANS ATM.

AMC3 ATS.TR.210(c)(2), based on Sections 5.11.1, 5.11.1.1 and 6.1 of PANS ATM, establishes the circumstances and the conditions for the application of a reduction to separation minima, as in the AMC related to procedural longitudinal separation minima listed above.

With regard to the application of the longitudinal separation minima based on Mach number in AMC5 and AMC6 to ATS.TR.210(c)(2)(i), the discussions held with the RMG members concluded that their applicability and use within the EU context is uncertain. **Therefore, in order to verify the applicability of these separation methods and minima in the EU context, the Agency invites the stakeholders to indicate whether these separation methods and minima are applied in their State and to what extent.**

AMC7, AMC8 and AMC9 to ATS.TR.210(c)(2)(i), transposed respectively from the relevant contents of Sections 7.9.2, 7.10.1, and 7.11 of PANS ATM, establish the methods, with the related minima, for the application of longitudinal separation between aircraft for the use of the same runway for landing and/or departure, except when time-based wake turbulence separation, as in ATS.TR.220, is



applied. Detailed and articulated requirements for the reduction of such longitudinal runway separation minima under specified conditions are also provided.

AMC10 and AMC11 to ATS.TR.210(c)(2)(i), derived from the relevant contents of Sections 5.6 and 5.7 of PANS ATM, prescribe methods and minima for the longitudinal separation between departing aircraft and between departing and arriving aircraft during the course of their flights, without prejudice to the runway separation methods and minima established in AMC7, AMC8 and AMC9 to ATS.TR.210(c)(2)(i).

AMC1 ATS.TR.210(c)(2)(ii), transposing various contents of Section 5.4.1.2.1 of PANS ATM, establishes the separation criteria lateral separation, which may be applied by various means, for which separation minima and associated conditions are provided. This AMC has to be read in conjunction with GM1 ATS.TR.210(c)(2)(ii), originating from Sections 5.4.1.1.1, 5.4.1.1.2, 5.4.1.1.4, which proposes general guidance for the application of lateral separation.

Furthermore, the Agency has not deemed necessary to propose the transposition of the following horizontal separation methods and minima included in Chapter 5 of PANS ATM, as they have not been considered suitable in the context of the proposed EU ATS requirements:

- ‘Lateral separation of aircraft on parallel or non-intersecting tracks or ATS routes’ in Section 5.4.1.2.1.6;
- ‘Lateral separation of aircraft on intersecting tracks or ATS routes’ in Sections 5.4.1.2.1.7 and 5.4.1.2.1.8;
- ‘Longitudinal separation minima based on distance using RNAV where RNP is specified’ in Section 5.4.2.6;
- ‘Longitudinal separation minima based on distance using ADS-B in-trail procedure (ITP)’ in Section 5.4.2.7;
- ‘Longitudinal separation minima based on distance using ADS-C climb and descend procedure (CDP)’ in Section 5.4.2.8, newly introduced with ICAO AN-WP/9014 (Amendment 7); and
- ‘Performance-based longitudinal separation minima’ in Section 5.4.2.9, newly introduced with ICAO AN-WP/9014 (Amendment 7).

ATS.TR.215, transposed from Sections 3.4.1 and 3.4.2 of Annex 11 and duplicated in SERA.8010, establishes the responsibilities of the ATS provider and the competent authority concerning the selection of the appropriate separation minima to be applied within given portions of airspace, the consultation with neighbouring ATS providers under specified conditions, and the notification of the established separation minima and their areas of application to the parties concerned.

ATS.TR.220 stipulates the circumstances for the application of wake turbulence separation to aircraft in the approach and in the departure phases. This requirement is already included in SERA.8012 with a text which was transposing the principles, and not the exact content, of Section 8.7.3.4.1 of PANS ATM. The analysis of the content of PANS ATM led to the conclusion that the text of SERA.8012 requires an amendment to specify, in accordance with Sections 5.8.1.1 and 5.8.1.2 of PANS ATM, that wake turbulence separation does not have to be applied to arriving VFR flights, as well as to arriving IFR flights executing a visual approach, when the pilot of these flights has declared to have the preceding aircraft in sight and has been cleared to maintain own separation. In these cases, the



ATC unit concerned has to issue a warning of possible wake turbulence to the following aircraft. The proposed text of ATS.TR.220 includes these principles and, for consistency, it is proposed to amend SERA.8012 accordingly, as also explained in Section 2.7.2 below.

AMC1 ATS.TR.220, based on Section 4.9.1.1 of PANS ATM, establishes a categorisation of aircraft based on the maximum certificated take-off mass for the purposes of the application of the appropriate wake turbulence separation minima.

AMC2, AMC3, AMC4 and AMC5 to ATS.TR.220, transposed from various parts of Section 5.8 of PANS ATM, stipulate the time-based wake turbulence separation minima to be applied between aircraft of the established wake turbulence categories in various circumstances, namely:

- between arriving aircraft;
- between departing aircraft;
- in case of displaced landing threshold; and
- aircraft flying in opposite direction.

AMC6 ATS.TR.220, derived from Section 8.7.3.4 of PANS ATM, prescribes the distance-based wake turbulence separation minima to be applied to landing and departing aircraft when ATS surveillance services are provided.

With the entry into service of the Airbus A380-800, an aircraft which generates vortices more substantial than for other aircraft in the HEAVY wake turbulence category, on 8 July 2008, ICAO issued a letter (identified as ICAO TEC/OPS/SEP – 08-0294.SLG ‘Wake turbulence aspects of Airbus A380-800 aircraft’) in relation to the requirements on wake turbulence separation minima published in the PANS-ATM. With this letter, ICAO provided guidance concerning the recognition of such aircraft type through a specific designation (SUPER) in the call sign for the purposes of radiotelephony procedures, and indicated specific wake turbulence separation minima to be applied between such aircraft and those of the other wake turbulence categories. ICAO strongly encouraged States to implement this guidance pending an amendment to the PANS-ATM. At the time of the publication of this NPA, such recommendations have not been included in PANS ATM yet.

In consideration of the safety relevance of this issue, and in order to ensure consistency with provisions in SERA.14065 ‘Radiotelephony procedures for air–ground voice communication channel changeover’ referring to the aircraft of ‘SUPER’ category, the Agency proposes to address the aforementioned recommendations in the AMC and GM related to ATS.TR.220. In order to minimise the impact on the Member States, AMC1 ATS.TR.220 leaves to the competent authority the prerogative to add a ‘SUPER’ category in addition to those established in accordance with PANS ATM; moreover, separation minima proposed for the Airbus A380-800 with the aforementioned ICAO letter are included in the AMC stipulating wake turbulence separation minima and associated with the optional ‘SUPER’ category.

ATS.TR.225, transposed from Sections 3.5.1 and 3.5.2 of Annex 11, institutes the principle that each aircraft has to be provided with ATC service by a single ATC unit at any given time. In addition, it stipulates that ATC service has to be provided within a given block of airspace on an exclusive basis by a single ATC unit. Delegation of control to other ATC units is allowed subject to prior coordination between affected parties.



ATS.TR.230, derived from the entirety of Section 3.6 of Annex 11, establishes the principles and the requirements for the transfer of the responsibility of control of aircraft between ATC units. Point (a) of this provision indicates in detail the modality (place and/or time) of the transfer of control between the various ATC units, or between control sectors or position within the same unit. In point (a)(2), the Agency proposes to explicitly address the transfer of control between two units providing approach control service, which was not contemplated in the original ICAO standard, by assimilating this case to the transfer of control between a unit providing area control service and a unit providing approach control service.

Point (b) of the provision concerns the fundamental principles for the coordination between ATC units purposed to the transferring of control of aircraft, with particular regard to the specification of the responsibility of the transferring and accepting units, as well as of the exchange of relevant information concerning the flights subject to the transfer, in particular when this is effected by the use of ATS surveillance systems. In consideration of the advanced capabilities in the EU context of systems supporting the coordination between ATC units, the transposition of Section 3.6.2.4 of Annex 11 into point (b)(6) is proposed with a different formulation, which imposes the accepting unit to notify the transferring unit of the assumed control and the positive radio contact with a transferred aircraft only when so agreed between the ATC units concerned. Point (b)(7), which is aligned with the objectives of SERA.14001, requires the use of standardised phraseology for coordination between ATS units or sectors, and allows the use of plain language only in the absence of phraseologies suitable for the purposes of the coordination.

AMC1 ATS.TR.230, based on Section 10.1.1.3 of PANS ATM, lists the elements which ATC units should address when setting the agreements for the coordination and the transfer of control of aircraft, while GM1 ATS.TR.230, originating from Sections 10.1.1.1 and 10.1.1.2 of PANS ATS, indicates the sequence of steps by which the units should effect the coordination and transfer process, and recommends the implementation of standardised procedures for this purpose. Accordingly, GM1 ATS.TR.230(a)(3)(i) and GM1 ATS.TR.230(a)(3)(ii), transposed respectively from the relevant provisions of Sections 6.5.2 and 6.3.2, provide guidance for the establishment of standardised procedures for transfer of control between the ATC units concerned and standard clearances for arriving and departing aircraft.

A number of AMC and GM, mainly transposed from Chapter 10 of PANS ATM, is proposed to address in detail the procedures for the coordination and the exchange of information pertaining to the transfer of control of aircraft between the various ATC units, and, in particular:

- AMC1 ATS.TR.230(b)(2) 'Coordination between ATC units providing ATS within contiguous control areas — General' derived from Sections 10.1.2.1.1 and 10.1.2.1.2 of PANS ATM;
- AMC2 ATS.TR.230(b)(2) 'Exchange of movement and control data between a unit providing area control service and a unit providing approach control service', derived from Sections 10.1.3.3.1 (first sentence), 10.1.3.3.2, and 10.1.3.3.3 of PANS ATM; and
- AMC3 ATS.TR.230(b)(2) 'Exchange of movement and control data between a unit providing approach control service and a unit providing aerodrome control service', derived from Sections 10.1.4.2.1 and 10.1.4.2.2 of PANS ATM.

GM1 and GM2 to ATS.TR.230(b)(2), transposed from the relevant content of Sections 10.1.2.3 and 10.1.3.2, are proposed to address respectively the coordination for approval requests and for take-



off and clearance expiry time. GM3 ATS.TR.230(b)(2), based on Section 4.8.4 of PANS ATM, puts forward the coordination actions to be undertaken by an ATC unit upon notification of the intention of an aircraft to change from VFR to IFR.

AMC1 ATS.TR.230(b)(7) prescribes the set of phraseologies, transposed without any modification from Section 12.3.5 of PANS ATM, to be used for the coordination between ATS units or sectors. It is recalled that this AMC proposes the transposition of phraseologies for coordination between ATS units in the context of PART-ATS, while phraseologies for air-ground communication are included in the SERA Regulation as they envisage collective pilot/ATS action.

ATS.TR.235 stipulates the contents of the ATC clearances and addresses their utilisation in various operational contexts; additionally, it includes specific requirements for the read back of clearances by the controllers, as well as for clearance coordination between ATC units. The provision replicates a consistent portion of ATS-applicable requirements in SERA.8015, as amended by Regulation (EU) 2016/1185. Its contents are derived from various parts of Section 3.7 of Annex 11, as well as from relevant contents from Sections 4.5.1, 4.5.7.2, 4.5.7.4, 8.6.5.2 (with some modifications consistent with the proposal for amendment in the Final Report of ICAO EANPG meeting #57) and 12.2.7 of PANS ATM.

In addition to the relevant provisions duplicated from SERA.8015, the following additional requirements are proposed:

- Point (a)(5), points out the responsibility of controllers providing ATS surveillance services with respect to the assurance of obstacle clearance for IFR flights vectored or assigned a direct route which takes them off published ATS routes or instrument procedures. The associated GM1 clarifies that the prescribed obstacle clearance is assured when the flights concerned are cleared at or above the established minimum flight altitudes. The proposed requirement includes some modifications from the original Section 8.6.5.2 of PANS ATM, proposed in the Final Report of ICAO EANPG meeting #57, which specify in further detail the circumstances under which such provision is applicable;
- Point (c), transposed from Section 3.7.1.2 of Annex 11, requires the ATS provider to assess the need to establish standard arrival and departure routes, in order to facilitate the issuance of ATC clearance and the handling of the traffic.

As also explained in Section 2.7.2 below, it is proposed to introduce appropriate amendments to SERA.8015 points (a) and (d)(3)(ii) to ensure complete alignment with ATS-related provisions included in ATS.TR.235.

A set of AMC and GM further details the application of the requirements in ATS.TR.235, in particular:

- AMC1 ATS.TR.235(b) 'Content of clearances for departing aircraft', based on Section 6.3.1.1 of PANS ATM;
- AMC2 ATS.TR.235(b) 'Contents of standard clearances for departing aircraft', based on Section 6.3.2.3 of PANS ATM;
- AMC3 ATS.TR.235(b) 'Clearances for arriving IFR flights', based on Section 6.5.1.3 on PANS ATM;





- AMC4 ATS.TR.235(b) 'Contents of standard clearances for arriving aircraft', based on Section 6.5.2.3 of PANS ATM;
- AMC1 ATS.TR.235(b)(2) 'Specification of clearance limit', further elaborated by the related GM1, based on the contents of Section 4.5.7.1 of PANS ATM;
- AMC1 ATS.TR.235(b)(4) 'Instructions in clearances relating to levels', based on Section 11.4.2.6.2.2 of PANS ATM; and
- GM1 ATS.TR.235(b)(4) 'Assignment of flight levels for controlled flights', based on Sections 5.3.3.1, 5.3.3.6, and 5.3.3.7 of PANS ATM.

ATS.TR.240, transposing the entirety of standards in Section 3.8 of Annex 11 and duplicated from SERA.3210(d)(4), requires the aerodrome control tower to control the movements of persons and vehicles on the manoeuvring area in order to avoid hazards to them or to aircraft operating on such area. For this purpose, points (c) and (d) afford maximum priority to vehicles assisting aircraft in distress, and establish the right of way among the various surface movements. Point (b) addresses the principles to be followed to manage the movement of persons and vehicles when low visibility procedures are applied.

AMC1 ATS.TR.240(a), originating from Sections 7.6.3.2.1 and 7.6.3.2.2 of PANS ATM, further details the principles to be applied in the control of persons or vehicles, in particular as regards the need for an authorisation from the tower to access to the manoeuvring area and principally to a runway, and with regard to the criteria for holding distance of persons and vehicles from a runway when an aircraft is landing or taking off. AMC2 ATS.TR.240, transposed from Section 7.4.1.5.4 of PANS ATM, dictates to the aerodrome controller to undertake immediate action in case an aircraft or a vehicle is lost or is uncertain of its position on the manoeuvring area.

ATS.TR.245 mandates the utilisation of the advanced surface movement guidance and control systems (A-SMGCS) or other suitable equipment when considered necessary to ensure a complete and adequate visual observation of the manoeuvring area, for the fulfilment of the objectives of the ATC service. While the originating Section 3.10 of Annex 11 referred to the use of 'surface movement radar (SMR)', the Agency explicitly proposes the use of A-SMGCS as a preferred technological solution in consideration of the related requirement in ADR.OPS.B.030 of Commission Regulation (EU) No 139/2014 and of the associated AMC and GM, as well as of the content of Section 6.5.6 of ICAO Doc 7030 EUR (part of which is proposed as GM1 ATS.TR.245) including specific requirements for the utilisation of such system in the European context.

Point (a) of ATS.TR.250, transposed from Section 5.10.1.2, establishes the requirements for the provision of essential traffic information to controlled flights, for which a description is provided in GM1 ATS.TR.250(a). AMC1 ATS.TR.250(a), originating from Section 5.10.2 of PANS ATM, prescribes the elements of essential traffic information for transmission to aircraft concerned. Point (b) of ATS.TR.250, based on Section 6.2.1 of PANS ATM, addresses the provision of essential local traffic information, which in accordance with GM1 ATS.TR.250(b) consists of aircraft, vehicles or personnel on or near the manoeuvring area or in the airspace used for arrivals and departures, which may constitute an hazard to the aircraft concerned. AMC1 ATS.TR.250(b), derived from Sections 7.4.1.3.1 and 7.4.1.3.3 of PANS ATM, advises the timely and unambiguous provision of such information to aircraft for the sake of the safety of flights.



ATS.TR.255 stipulates the requirements for the ATS providers concerning independent or dependent approaches or departures from parallel or near-parallel runways. The ICAO provisions for operations on parallel or near-parallel runways, principally included in Section 6.7 of PANS ATM, are a collection of specific requirements for communication, surveillance, and navigation integrated with a proven set of operational procedures and instructions. These provisions, when applied in the specified conditions, can be used to establish and maintain lateral separation of aircraft operating on parallel or near-parallel runways. All the details therein were part of the assumptions or identified as mitigating factors in the safety assessment of the specific subsets of the operations on parallel or near-parallel runways. When considering the application of these provisions, the underlying objective to maximise the throughput on the aerodromes with such runway layout should also be considered, in addition to the achievement of the objectives of ATC service.

Consequently, following a thorough analysis of Section 6.7, in support of the implementation of ATS.TR.255, the Agency proposes its transposition into various AMC and GM which address the relevant aspects, including inter alia the necessary conditions to be met to conduct the various types of operations, the use of ATS surveillance systems, the separation minima, the information to be provided to aircraft, in particular:

- GM1 ATS.TR.255, suggesting to consult the ICAO Manual on Simultaneous Operations on Parallel or Near-Parallel Instrument Runways (SOIR) (Doc 9643), to obtain guidance on operations on parallel or near-parallel runways;
- AMC1 ATS.TR.255 'Requirements and procedures for independent parallel departures', originating from Sections 6.7.2.1 and 6.7.2.2 of PANS ATM;
- AMC2 ATS.TR.255 'Requirements and procedures for independent parallel approaches', originating from Sections 6.7.3.1.2, 6.7.3.2.1, 6.7.3.2.2 first sentence, 6.7.3.2.3, 6.7.3.2.4, 6.7.3.2.10, and 6.7.3.3. The application of specific aspects of this AMC is further supported by 6 GM;
- AMC3 ATS.TR.255 'Requirements and procedures for dependent parallel approaches', originating from Sections 6.7.3.4.1, 6.7.3.4.2, and 6.7.3.4.3 of PANS ATM; and
- AMC4 ATS.TR.255 'Requirements and procedures for segregated parallel operations', originating from Sections 6.7.3.5.1, 6.7.3.5.2, and 6.7.3.5.3 of PANS ATM.

It is pointed out that changes in the assumptions, functionalities or performances of the systems and procedures laid down in the ICAO provisions transposed under ATS.TR.255, have to be subject to a comprehensive safety assessment where such changes, including the additional failure modes, are identified and fully assessed, if variation to the existing provisions for the separation procedures in the proposed AMC is to be implemented.

ATS.TR.260, transposed from Section 7.2.2 of PANS ATM, establishes the elements to be considered by a unit providing aerodrome control service when selecting the runway in use for the take-off and landing of aircraft. The related AMC1, based on Sections 7.2.4 and 7.2.6 of PANS ATM, addresses the interrelation between noise abatement and the selection of the runway in use.

ATS.TR.265, based on Sections 7.12.1.1, 7.12.1.1.1, 7.12.1.1.2, and 7.12.2.1 of PANS ATM, includes specific measures to be applied in the provision of aerodrome ATC service, when the visibility conditions are such that prevent the application of a visual separation from the tower. Such



measures concern the definition of limits to hold at specified locations of the manoeuvring areas and the application of specific longitudinal separation minima, which have to be determined for each aerodrome and approved by the competent authority. It also institutes the ATS provider responsibilities with regard to the provisions for the conduct of Cat II and Cat III operations and for departure operations in RVR conditions less than 550 m, to be coordinated with the aerodrome operator and submitted to the competent authority for approval. AMC1 ATS.TR.265, based on Sections 7.12.3, 7.12.4, 7.12.5, and 7.12.6 of PANS ATM, prescribes the elements to be specified when addressing low visibility operations, and represents the pivotal role of the aerodrome control tower for the initiation of such operational mode, for the notification of its activation and deactivation and for the continuous monitoring of persons and vehicles allowed to enter the manoeuvring area.

The provisions concerning low visibility operations proposed with this NPA may be subject to amendments as a result of the regulatory activities undertaken by the Agency under RMT.0379 'All-weather operations', in particular as regards the definition of limits for low visibility operations.

ATS.TR.270, transposed with textual modifications from Sections 7.14.1, 7.14.1.1, and 7.14.1.3 of PANS ATM, dictates the conditions for the issuance of authorisations to operate special VFR flights. With the exception of point (b) which requires the ATC unit to handle requests for special VFR individually, the remaining content of the provision is duplicated from SERA.5010. GM1 ATS.TR.270(a)(3), identical to GM2 SERA.5010(b), as proposed by the Agency with NPA 2015-14, clarifies that aircraft not intending to take off or land or enter the traffic circuit at the aerodrome when the ground visibility is less than 1 500 m may be cleared for special VFR to cross the affected control zone.

ATS.TR.275 stipulates the requirements concerning the verification and the use of pressure-altitude-derived level information in the provision of ATC service when ATS surveillance systems are available. Point (a), derived from Section 8.5.5.1.2 of PANS ATM and duplicated from SERA 13010(b) introduced with Regulation (EU) 2016/1185, addresses the frequency at which such information is to be verified by ATCOs. AMC1 ATS.TR.275(a) establishes a tolerance value to be used in the verification of the accuracy of this information, while AMC2 ATS.TR.275(a) stipulates that the verification is to be done by comparing simultaneously the value observed and the value reported by the same aircraft. Point (b) prescribes the exclusive use of pressure-altitude-derived level information to determine that aircraft have acquired specific positions in respect of a given level. The application of this provision is further described in AMC1 ATS.TR.275(b), transposed from Sections 8.5.5.2.1, 8.5.5.2.2, 8.5.5.2.3, 8.5.5.2.4, and 8.5.5.2.5 of PANS ATM, in order to ascertain that aircraft:

- maintain a level;
- vacate a level;
- pass a level in climb or descent;
- reach a level.

on the basis of given level occupancy criteria.



#### 2.7.1.4.3. Section 3 — Flight information service

This section pertains to rules that enable the provision of FIS, whose purpose is to provide advice and information useful for the safe and efficient conduct of flights. Therefore, an adequate provision of this service by the ATS units concerned is essential for the successful progress of aircraft operations.

A number of technical references have been taken into account to regulate this particular service. As in other cases, ICAO Annex 11 and PANS ATM represent the core source of information to develop the proposed technical requirements and their corresponding AMC/GM; however, ICAO Circular 211-AN/128 and EUROCONTROL Manual for Aerodrome Flight Information Service (AFIS) have also been considered, so as to ensure the inclusion of specific provisions for AFIS.

ATS.TR.300 establishes provisions for the application of FIS. Points (a) and (b), which are transposed from Sections 4.1.1 and 4.1.2 of Annex 11 and which duplicate those in SERA.9001 in the SERA Regulation, stipulate to what aircraft flight information is to be rendered and how ATC is to be assigned a higher priority over the provision of FIS when the relevant ATS units are responsible for both services. GM1 ATS.TR.300(b), derived from the Note to Section 4.1.2 of PANS, recognises that there might be circumstances taking place on the final approach, landing, take-off and climb, in which the provision of essential information can have precedence over ATC service.

Point (c) pertains to the establishment of arrangements to record and transmit information on the progress of flights, as well as to ensure coordination and transfer of responsibility for the provision of the FIS. These contents are founded on the principles in Sections 9.1.1 and 9.1.2 of PANS ATM, though the proposed requirement underlines that the responsibility for putting in place the associated procedures rests with the FIS provider.

AMC1 ATS.TR.300(c)(1), transposing the content of Section 9.1.1 of PANS ATM, addresses responsibility of the ATS unit serving the FIR for recording information on the progress of flights, as well as for transmitting it to other ATS units concerned with the provision of flight information and alerting services in adjacent FIRs, so as to ensure coordination in respect of IFR and VFR flights. AMC1 ATS.TR.300(c)(2), based on Section 9.1.2 of PANS ATM, addresses the coordination and transfer of responsibility between ATS units providing services in adjacent FIRs, so as to ensure that, as far as practicable, flight information can be provided to the aircraft at all times.

GM1 ATS.TR.300(c)(2) transposes Section 10.1.2.5 of PANS ATM with the purpose of indicating that ATC units should make available the necessary information to other ATS units concerned with the flight, whenever an aircraft is no longer operated as a controlled flight.

GM2 ATS.TR.300(c)(2), which is based on Sections 10.2.1, 10.2.2, 10.2.3, 10.2.4 and 10.2.5 of PANS ATM, explains the need for ATS units to establish appropriate agreements addressing the coordination for the provision of flight information and alerting services to aircraft operating across adjacent FIRs in specified routes or areas, in order to ensure continuity of FIS. In particular, this provision describes some essential information to be transmitted in respect of IFR and VFR flights operating in specified areas or along specified routes, in order to facilitate the transfer of responsibility between ATS units providing those services in adjacent FIRs. It also addresses the exchange of information in relation to aircraft operating along specified areas in close proximity to FIR boundaries, with the purpose of limiting the need for interception. Finally, it underlines the importance of reporting on an emergency situation to any ATS unit concerned with the flight and, if necessary, to the associated rescue coordination centre.



ATS.TR.305 defines the scope of FIS, and, as a novelty compared to the original Annex 11 provisions from which it originated, includes explicit requirements for AFIS. Points (a) and (b), which are based on Sections 4.2.1 and 4.2.2 of Annex 11, describe general information pertaining to the provision of the FIS. Both had already been transposed as SERA.9005(a) and SERA.9005(b) respectively into the SERA Regulation. However, the Agency proposes to introduce, in addition, the requirement to inform the pilots of any abnormal aircraft configuration and condition known by the ATCO or by the AFIS officer, as considered in Section 7.4.1.7 of PANS ATM, which is in turn transposed as AMC1 ATS.TR.305(a)(7) to ensure its implementation and provide clarification on this matter. Consequently, the Agency proposes to amend SERA.9005(a) as explained also in Section 2.7.2 below.

Furthermore, point (c) specifies the additional information to be provided to aircraft by AFIS units, in consideration of the specific aerodrome environment. Such additional information is derived from the ICAO Circular 211-AN/128. It is important to point out that AFIS units are in charge of providing FIS and alerting service, and that in no circumstances are they authorised to undertake actions related to the provision of ATC, such as issuing instructions to aircraft and vehicles on the ground, or selecting the runway to be used for take-off and landing at the aerodrome, which should remain a prerogative of the pilots.

With respect to the need for transmission of special and non-routine air-reports, point (d) reproduces SERA.12020 of the SERA Regulation and adds a reference to Appendix 5 to the SERA Regulation in order to improve its understanding. Its content is based on the recommended practice in Section 4.2.3 of Annex 11. Duplicating SERA.9005(c) of the SERA Regulation, point (e) equally transposes Section 4.2.4 of Annex 11, so as to ensure that information on traffic and weather conditions that may adversely affect the progress of VFR flights along their routes are also contemplated within the scope of the service.

AMC1 ATS.TR.305, based on Sections 9.1.3.1.1, 9.1.3.1.2, 9.1.3.2.1, 9.1.3.2.2, 9.1.3.3, 9.1.3.4, 9.1.3.5.1, 9.1.3.5.2, 9.1.3.6, and 9.1.3.7 of PANS ATM, sets out means of transmission in order to enable the provision of flight information; it specifically addresses procedures for the transmission of information concerning air-reports, SIGMET, AIRMET, volcanic activity, radioactive materials, toxic chemical clouds, SPECI, amended TAF, heavy or medium unmanned free balloons to aircraft, as well as supersonic aircraft, when applicable.

AMC1 ATS.TR.305(a);(b) transposes Section 6.4.1 of PANS ATM with the purpose of making up-to-date information available to departing aircraft by the unit providing approach control service, whenever significant changes in meteorological conditions occur. The associated GM1 to AMC1 ATS.TR.305(a);(b), based on the Note to Section 6.4.1 of PANS ATM, specifies what is meant by 'significant changes' by providing a list of relevant meteorological phenomena.

In line with the general objective of better defining and harmonising the provision of AFIS, four GM are proposed to indicate the information to be issued by AFIS units to the aircraft concerned; such GM are derived from the ICAO Circular 211-AN/128 and from the EUROCONTROL AFIS Manual. More specifically:

- GM1 ATS.TR.305(a);(b);(c), based on the contents of paragraph 6.d) 'General' of the ICAO Circular 211-AN/128, provides a list of relevant information on aerodrome conditions and changes in such conditions that an AFIS unit should transmit to aircraft;



- GM2 ATS.TR.305(a);(b);(c), reflecting the content of Section 3.4.1 of the EUROCONTROL AFIS Manual, points out specific traffic information that an AFIS unit should provide to aircraft;
- GM3 ATS.TR.305(a);(b);(c), based on Section 3.4.2 of the EUROCONTROL AFIS Manual, addresses the need to make available information on local traffic to the aircraft concerned in order to ensure safety;
- GM4 ATS.TR.305(a);(b);(c), originating from Section 3.4.5 of the EUROCONTROL AFIS Manual, provides information on wake turbulence and jet blast with the purpose of indicating AFIS units to:
  - take due account of hazards associated with these phenomena, and
  - as far as practicable, advise aircraft, vehicles or personnel potentially affected by them.

AMC1 ATS.TR.305(a)(5), transposed from Section 7.5.3 of PANS ATM, underlines the importance of a timely and clear transmission of essential information with regard to aerodrome conditions unless it is known that information has already been received by the aircraft from other sources.

The related GM1 to AMC1 ATS.TR.305(a)(5) explains what is meant by ‘essential information on aerodrome conditions’ and provides a list of examples to illustrate this matter on the basis of the contents of Sections 7.5.1, 7.5.2 and of the Note to Section 7.5.2 of PANS ATM.

AMC2 ATS.TR.305(a)(5), which transposes Section 6.4.2 of PANS ATM, underlines the need to transmit changes in the operational status of essential visual and non-visual aids to departing aircraft whenever these changes remain unknown by the flight crew and may have an impact on take-off and climb operations.

GM1 ATS.TR.305(a)(6), transposed from Sections 16.2.1, 16.2.2 and 16.2.3 of PANS ATM, describes the list of information concerning the intended flight of medium or heavy free balloons and the circumstances under which the ATS units are required to disseminate such information to all concerned, which may include also recipients other than aircraft and other ATS units (e.g. military organisations). In this case, the notification could be configured as an action outside the scope of FIS, which related to the provision of information to aircraft.

GM1 ATS.TR.305(b)(2) is a duplication of GM1 SERA.9005(b)(2), whose contents were based on the Note to Section 4.2.2(b) of ICAO Annex 11. It draws attention to the fact that ATS units may not always be totally aware of every activity that may constitute a collision hazard. Thereby, it represents the limitation in terms of accuracy of information, and clarifies the limited responsibilities of ATS units in this context.

GM1 ATS.TR.305(c)(1), on the basis of the content of Section 4.2.7 of the EUROCONTROL AFIS Manual, addresses the AFIS units to advise landing or departing aircraft of any potential runway incursion or obstruction.

GM1 ATS.TR.305(c)(2) provides guidance to AFIS units on the factors and on the operational elements to be considered in the selection of the most suitable runway for use at AFIS aerodromes. Its content has its origin in Section 3.2.2 of the EUROCONTROL AFIS Manual.

ATS.TR.310, based on Sections 4.3.4.1, 4.3.4.2, 4.3.4.3, 4.3.4.4, 4.3.4.5, 4.3.4.6, and 4.3.4.8 of Annex 11, regulates the various aspects of the provision of Voice-ATIS broadcasts, such as the allocation of messages to departing and/or arriving aircraft depending on local circumstances, the proper use of



the frequencies for transmission, the duration of broadcast message, the broadcast language which should be as a minimum in English, etc.

GM1 ATS.TR.310(f), transposing the recommended practice in Section 4.3.4.7 of Annex 11, suggests the use of different channels when an ATIS message is broadcast in different languages. GM1 ATS.TR.310(g), reflecting the second part of the recommended practice in Section 4.3.4.8 of Annex 11, emphasises the need to take human factors into account when preparing Voice-ATIS message in order to ensure pilot's understanding.

ATS.TR.315, based on Sections 4.3.5.1, 4.3.5.1.1, and 4.3.5.2 of Annex 11, regulates the transmission of ATIS via data link and stipulates that, when D-ATIS is provided, full consistency has to be ensured with the content of Voice-ATIS broadcasts. It also indicates the criteria to keep the message designator when changes to meteorological information has to be incorporated. The related GM1 ATS.TR.315 indicates the ICAO Manual of Air Traffic Services Data Link Applications (Doc 9694) as a source of information concerning D-ATIS broadcasts.

ATS.TR.320, whose content is based on Sections 4.3.6.1, 4.3.6.2, 4.3.6.3, and 4.3.6.4 of Annex 11, prescribes some relevant aspects of ATIS (both voice and data link) broadcasts regarding messages preparation and update, dissemination process, acknowledgment of receipt and complementary transmissions to provide the aircraft with additional information or, whenever necessary, to correct ATIS messages. Points (a)(5), (a)(6), (c) and (d) of ATS.TR.320 had been previously transposed as SERA.9010(a)(2), SERA.9010 (a)(3), and SERA.9010 (a)(4), respectively. GM1 ATS.TR.320 refers to SERA.9010(b), (c) and (d) of the SERA Regulation, which prescribe in detail the contents of ATIS messages for arriving aircraft, departing aircraft or both. GM1 ATS.TR.320(d) proposes that updates to information included in the ATIS messages are always made available to aircraft, either by instructing the aircraft to find them via the ATIS broadcast available or specifically transmitted by the ATS unit.

ATS.TR.325 adopts the recommended practices in Sections 4.4.1 and 4.4.2 of Annex 11, related to the use of VOLMET and D-VOLMET broadcasts, which have to be provided at the discretion of the competent authority and, in any case, using standard radiotelephony phraseologies. In addition, GM1 ATS.TR.325, derived from the Note to Section 4.4.2 of Annex 11, provides a reference to ICAO Doc 9377 as a source of guidance material on standard radiotelephony phraseologies to be used in VOLMET broadcasts.

As a result of the analysis of the content and the application of Section 4.3 'Operational flight information service broadcasts' of Annex 11, the Agency, supported by RMG.0464, concluded that there was no evidence that HF and VHF operational flight information service (OFIS) broadcasts, as described respectively in Sections 4.3.2 and 4.3.3, are provided anywhere in the EU. On these grounds, the Agency decided not to propose requirements for these information services.

**In order to validate this approach, the Agency requests its stakeholders:**

- **to indicate if they agree with this approach; and**
- **to indicate if they are aware of any provision of HF and VHF OFIS broadcasts in the EU, and, should this be the case, to provide more detailed information.**



#### 2.7.1.4.4. Section 4 — Alerting service

Alerting service consists of the notification to appropriate organisations regarding aircraft in need of search and rescue aid, and of support to such organisations as required. Alerting service is provided by FICs, ATC units and AFIS units to assist aircraft considered or known to be in a state of emergency. Due to the importance of alerting service, there is a clear need to set out specific technical requirements, complemented by AMC and GM. The proposed rules are based on applicable SARPs included in Chapter 5 of ICAO Annex 11, together with specific procedures derived from PANS ATM, particularly Section 9.2, as well as other sections addressing the necessary ATS coordination to render assistance and prompt notification of an emergency situation to rescue coordination centres and nearby rescue and firefighting services.

ATS.TR.400, established on the transposition of Sections 5.1.1, 5.1.2, 5.1.3, and 5.1.3.1 of Annex 11, determines what aircraft are to be provided with alerting service and addresses essential responsibilities and coordination amongst stakeholders involved in the assistance. This provision explicitly includes AFIS units in its scope. It is important to mention that ATS.TR.400(a) duplicates SERA.10001(a). In addition, ATS.TR.400(d) adds the requirement, derived from the transposition of the first sentence of Section 7.1.2.2 of PANS ATM, to determine in local instructions the coordination procedures with the rescue and firefighting services. More details on the local instructions are provided in AMC2 ATS.TR.400(d), which transposes the remaining content of Section 7.1.2.2 of PANS ATM.

AMC1 ATS.TR.400(d) identifies what circumstances should make an ATS unit to alert the rescue and firefighting services. It is based on Section 7.1.2.1 of PANS ATM, but introduces some differences in respect of the ATS units that could alert the local rescue and emergency services. Instead of limiting its scope to an aerodrome control tower, the proposal also includes approach control units and AFIS units in order to:

- set in motion the local emergency procedures, whenever the need for assistance is already known or anticipated by the corresponding approach control unit; and
- take into account aerodromes where AFIS is provided instead of aerodrome control service.

GM1 ATS.TR.400(b), transposed from Sections 9.2.2.2, 9.2.2.3, and 9.2.2.4 of PANS ATM, aims at determining what ATS unit is responsible for the coordination of the alerting service whenever a flight is operated through more than one FIR or control area, and when the position of the aircraft is in doubt. It also points out the main actions to be taken by the unit responsible so as to ensure the provision of the alerting service.

ATS.TR.405, based on Sections 5.2.1, 5.2.2, 5.2.2.1, and 5.2.3 of Annex 11, pertains to the definition of emergencies subject to notification to the rescue coordination centre in accordance with certain emergency phases (uncertainty, alert and distress phases), which are described one by one in details. It also stipulates the information that needs to be made available and the order in which each of the elements of the messages is to be conveyed when the emergency phases are reported to the rescue coordination centre. AFIS aerodromes are addressed explicitly in respect of the declaration of the alert phase due to the operational context described in the provision, in order to take account of any specific circumstances prescribed by the competent authority, as described in GM1 ATS.TR.405(a)(2)(iii).





GM1 ATS.TR.405(a)(1), transposed from Section 9.2.2.1 of PANS ATM, emphasises the need to try to obtain a report from an aircraft within the stipulated period of 30 minutes prior to the declaration of the 'uncertainty phase' whether circumstances warrant such application.

GM1 ATS.TR.405(a)(2)(ii), based on Section 7.1.2.3 of PANS ATM, is specific for aerodrome control towers and addresses coordination with all relevant units or centres and the need to launch the alert phase in respect of arriving aircraft that fail to land 5 minutes after the expected landing time and radio contact is no longer possible. GM1 ATS.TR.405(a)(2)(iii) indicates that the same procedure is applicable by the AFIS units, but the 5-minute element is replaced by a time interval to be determined by the competent authority.

GM1 ATS.TR.405(c) is not derived from ICAO provisions, but its development together with ATS.TR.405 was necessary to make clear that any anticipated information not available at the time the notification of the distress phase is made to a rescue coordination centre should be clearly indicated by the ATS unit. GM1 ATS.TR.405(d), transposing a note to Section 5.2.3 of Annex 11, clarifies that cancellation of actions initiated by the rescue coordination centres is responsibility of that centre, irrespective of any information received from the ATS units regarding the state of aircraft involved.

ATS.TR.410, transposed from Section 5.3 of Annex 11, mandates that ATS units make use of any available communication facilities to keep in contact with the aircraft involved and also to collect all information relevant to its state of emergency.

ATS.TR.415 stipulates the obligation to continuously determine or estimate the position of an aircraft considered to be in a state of emergency by all ATS units aware of the existing situation. Its content is based on the first sentence of Section 5.4 of Annex 11, but this proposal additionally contemplates the use of any possible means to monitor the estimated position of the aircraft rather than being restricted to the use of charts, so as to make the most of available technology. AMC1 ATS.TR.415 established by the transposition of the first sentence of Section 8.8.1.2 of PANS ATM, points out the use, whenever available, of ATS surveillance systems to assist in tracking the position of an aircraft subject to an emergency situation. It also contemplates the need to share this kind of information with other ATS units that could render assistance to the aircraft involved.

ATS.TR.420, based on Sections 5.5.1 and 5.5.2 of Annex 11, is pertinent to coordination to be established by the ACC or FIC with the aircraft operator prior to the notification to the rescue coordination centre of the uncertainty or alert phase, whenever practicable. Also, it establishes that all information communicated to the rescue coordination centre has also to be shared with the aircraft operator as soon as practicable.

ATS.TR.425, transposed from Sections 5.6.1 and 5.6.2 of Annex 11 and duplicated as in SERA.10005, addresses the requirement for ATS units to share information on aircraft in a state of emergency with other aircraft in its vicinity, and prescribes specific limitations for air-ground communication from the ATS units in case of aircraft subject to unlawful interference.



### 2.7.1.5. Amendments to Annex V — Subpart A ‘Additional organisation requirements for providers of meteorological services (MET.OR)’

#### **MET.OR.242**

Having explicitly recognised the AFIS unit within the scope of ATS units, the Agency proposes to amend the content of point (a) of MET.OR.242 ‘Information to be provided to air traffic services units’, in order to define the set of meteorological information which the relevant meteorological office has to provide to the AFIS unit. Such information is identical to that to be provided to aerodrome control tower, unless otherwise specified by the competent authority, under the conditions stipulated in point (a) of ATS.OR.515.

#### **MET.OR.245**

Section 7.6 of Annex 11 stipulates, inter alia, that information concerning the release into the atmosphere of toxic chemicals is to be made available to ATS units when such phenomenon could affect the airspace under their responsibility. Provisions in Chapter 3 of Section 2 of Subpart A of Annex V ‘Part-MET’ do not include such requirement when establishing the set of information to be provided by the meteorological watch office to the various ATS units. For this purpose, it is proposed to amend MET.OR.245 in Annex V by introducing a new point (g) dictating the meteorological watch office to provide such information to the ATS units concerned.

### 2.7.2. Amendments to the SERA Regulation

This section contains the explanatory notes to the amendments to the SERA Regulation, which are included in Section 1.2 of NPA 2016-09(B), and more specifically:

#### **Additional recital**

Serving the same purpose as that of the proposed introduction of a recital in the ATM/ANS Common requirements Regulation, this recital is introduced to represent and highlight the very close interrelation between the proposed requirements in PART-ATS and those in the SERA Regulation, as successively amended.

#### **Definition of ‘controlled aerodrome’**

The rationale behind and the content of the proposed modification to the definition of ‘controlled aerodrome’ are provided in Section 2.7.1.2 above. In order to ensure consistency, it is proposed to amend such definition also in the SERA Regulation.

#### **SERA.8005**

The amendments to SERA.8005, considered necessary to better clarify the existing provisions, are proposed to ensure full consistency with ATS.TR.210.

The term ‘instructions’ is introduced in SERA.8005(a)(3) to make explicit that the issuance of instructions, for which a definition originating from PANS ATM is proposed for inclusion in Annex I, is a specific task of the ATC units, as resulted also from the analysis of the relevant ICAO ATC-related provisions.

The amendment in the opening sentence of SERA.8005(c) is proposed as a consequence of the introduction in ATS.TR.255 of requirements for operations on parallel or near-parallel runways derived



from the transposition of Section 6.7 of PANS ATM, which include separation minima and criteria representing an exception to the general principle expressed in this context.

The amendment to SERA.8005(c)(1), transposed from Section 5.2.1.4 of PANS ATM, prevents that geometric height information is used to establish vertical separation.

#### **SERA.8012**

The proposed amendment aims at completing the original SERA provision addressing the application of wake turbulence separation and is full consistent with ATS.TR.220. The analysis of Section 5.8 of PANS ATM allowed the identification of categories of flights in specific phases, for which wake turbulence is not to be applied and for which instead ATC is required to notify the pilots concerned about the risk to encounter wake turbulence.

#### **SERA.8015**

The proposed amendment to SERA.8015(b)(6), fully consistent with ATS.TR.235(a)(5), results from the transposition of Section 8.6.5.2 of PANS ATM, including the modifications agreed in the Final Report of ICAO EANPG #57. It stipulates the responsibility for the ATC to issue, under specific circumstances, clearances assuring the prescribed obstacle clearance.

The proposed amendment to SERA.8015(d)(3)(ii), consistent with ATS.TR.235(b)(3)(ii), aligns the text of the provision with the current version of Section 4.5.7.2 of PANS ATM from which it is transposed, which has been subject to modification by ICAO AN-WP/9014 (Amendment 7 to PANS ATM).

#### **SERA.9005**

The proposed amendment, fully consistent with ATS.TR.305(a)(7), introduces the obligation to provide, within the scope of FIS, information to aircraft when the aerodrome control tower or the AFIS unit observes or becomes aware that such aircraft displays an abnormal condition or configuration (e.g. landing gear not extended, unusual smoke emission).

#### **SERA.14095**

This provision, originating from Section 4.1.3.1.1 of Annex 10 Volume V and also proposed as ATS requirement (ATS.OR.405(a)), establishes the conditions for the use of the VHF emergency channel. As the requirement addresses various entities (e.g. aircraft, entities involved in search and rescue operations, etc.), and not only ATS units, it is considered appropriate to include it in SERA.14095 as well.

### **2.7.3. Amendments to ED Decision 2013/013/R (AMC/GM to the SERA Regulation)**

This section contains the explanatory notes to the amendments to the ED Decision 2013/013/R (AMC/GM to the SERA Regulation) included in Section 1.4 of NPA 2016-09(B), and more specifically:

#### **GMX SERA.14095**

The proposed amendment, fully consistent with GM2 ATS.TR.210(c)(1) indicates the possible sources of geometric height information which, according to the amendment to SERA.8005(c) described above, are not to be used for the purposes of establishing vertical separation between aircraft.



**GMY SERA.14095**

The introduction of this GM, fully consistent with GM1 ATS.OR.405(a)(3), also in relation to SERA.14095, better specifies the condition for the use of the VHF emergency channel in case of search and rescue operations.



### 3. Regulatory impact assessment (RIA)

#### 3.1. Problem definition

##### 3.1.1. ATS regulatory framework

###### 3.1.1.1. The ICAO ATS regulatory context

Since decades, ATS have been provided globally in accordance with the SARPs included in Annex 2 and in particular in Annex 11 to the Chicago Convention. ICAO Contracting States, including all EU States, are required to apply such SARPs, or to notify ICAO of any difference between the Standards and the national regulation and practices, and invited to do so as far as Recommended Practices are concerned. In order to establish more detailed guidance on the implementation of the ATS provisions established in the Annexes, which are often expressed in the form of principles, ICAO publishes and maintains a set of related documents (e.g. Doc 9426 'Air Traffic Services Planning Manual').

The most relevant of such documents for the purposes of ATS is Doc 4444 'Air Traffic Management', also known as PANS ATM, which specifies, in greater detail than in the SARPs, the actual procedures to be applied by the relevant units in providing the various ATS to air traffic. Procedures for Air Navigation Services (PANS) may contain material which may eventually become Standards or Recommended Practices when it has reached the maturity and stability necessary for adoption as such. PANS may also comprise material prepared as an amplification of the basic principles in the corresponding SARPs, and designed particularly to assist the user in their application. The implementation of PANS is the responsibility of the Contracting States, which are not obliged to notify differences in the event of non-implementation, as instead is the case for SARPs; ICAO, however, recommends States to publish differences from such PANS in the national Aeronautical Information Publication (AIP).

###### 3.1.1.2. The current EU ATS regulatory context

Since the initial introduction of EU legislation addressing the provision of ATS (Regulation (EC) No 2096/2005), the aforementioned ICAO documents, and in particular the SARPs, were considered as the regulatory reference for the provision of ATS. Therefore, within Regulation (EC) No 2096/2005, a requirement (in Chapter 4 of Annex II) stipulated that providers had to apply working methods and operating procedures compliant with those in ICAO Annex 2, Annex 10 Volume II, and Annex 11, when providing ATS. The same provision (with updated references to successive editions of the said ICAO material) was replicated in Regulation (EU) No 1035/2011 which repealed Regulation (EC) No 2096/2005, and successively amended by replacing the reference to ICAO Annex 2 with a reference to the SERA Regulation which in the meantime transposed ICAO Annex 2 into the EU legislation with the purpose of establishing the common European rules of the air.

The ATM/ANS Common Requirements Regulation has maintained this provision referencing to ICAO (in Annex IV, Subpart B, Section 1), with the updated reference to the latest editions of the Annex 10 Volume II and Annex 11. Said provision is expected to be replaced by a comprehensive set of requirements addressing the provision of ATS, proposed with this NPA.



### 3.1.1.3. Transposing ICAO ATS provisions into the EU aviation safety regulatory framework

In recognition of the fundamental reference of the ICAO SARPs and PANS for the provision of ATS, and of the related obligations of the EU Member States towards the Chicago Convention, when developing rules for the implementation of the principles and of the Essential Requirements on ATM/ANS stipulated in Annex Vb to the Basic Regulation, the Agency decided to transpose the relevant ICAO provisions into the EU legislation. This approach supports the achievement of the objective established in Article 2(d), which is 'to assist Member States in fulfilling their obligations under the Chicago Convention, by providing a basis for a common interpretation and uniform implementation of its provisions, and by ensuring that its provisions are duly taken into account in this Regulation and in the rules drawn up for its implementation'.

With this approach, a full harmonisation of the implementation of the ICAO provisions throughout EU would be achieved, by eliminating the numerous differences established by the divergent national interpretations and implementation of ICAO SARPs and PANS. Differences in the implementation would still be possible at a local level under the EU legal mechanisms allowed by Article 14 of the Basic Regulation and/or, when applicable, by the submission of alternative means of compliance.

The SERA Regulation including the amendments introduced with Regulation (EU) 2016/1185, and the ATM/ANS Common Requirements Regulation, specifically for MET requirements and AIS requirements (proposed with NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'), with the associated AMC and GM, were in fact developed by transposing the relevant ICAO provisions into the EU legislation, in accordance with the principles described above. In particular, there is a strong interrelation between PART-ATS and the SERA Regulation, due to the complementary nature of the two regulatory packages; SERA has already transposed a significant number of Annex 11 and PANS ATM provisions, which are duplicated in or complementary to those proposed in PART-ATS with this NPA.

In the given context, the decision to transpose the ICAO reference material to establish EU ATS requirements was not an option, but an approach established and consolidated by other ATM/ANS-related regulatory activities which preceded the initiation of this rulemaking task. For this reason, a pre-RIA on the need for and on the most appropriate method to develop RMT.0464 was not performed; hence, the Terms of Reference for RMT.0464, issued following the Agency's Advisory Bodies' consultation without substantial comments, did explicitly mandate the transposition approach.

Therefore, the regulatory package proposed with this NPA responds to the regulatory mandate of the Basic Regulation with regard to the provision of ATS, in particular by implementing the Essential Requirements in Chapter 2.(c) of Annex Vb. It substitutes the reference to ICAO Annex 10 Volume II and Annex 11, and to the SERA Regulation with a complete package of IRs, and the associated AMC and GM.

The proposed measures were developed by analysing and transposing, on a case-by-case basis and in full respect of their original regulatory force under the ICAO framework, the content of Annex 10 Volume II, Annex 11, PANS ATM, Doc 7030 EUR and other relevant material. The package transposes



those ICAO provisions which were considered by the Agency and RMG.0464 as suitable for the EU context, with the necessary modifications to fit into the EU regulatory framework.

In this context, the Agency does not consider necessary to perform a detailed RIA on the establishment of EU ATS requirements transposing the ICAO relevant material. Instead, a full RIA is performed with regard to the introduction of measures addressing the provision of AFIS, which is not explicitly addressed by the referenced transposed ICAO material.

### 3.1.2. AFIS

#### 3.1.2.1. Introduction

AFIS is included in the scope of ATS; more specifically it is a subset of FIS, when such service is provided at an aerodrome and in its vicinity. AFIS units provide information and advice to aircraft to achieve a safe, orderly and expeditious flow of air traffic at and close to an aerodrome in order to assist pilots in preventing collision between aircraft flying within their area of responsibility. AFIS includes, inter alia, traffic information, information on the meteorological conditions at and in the vicinity of the aerodrome, information on the aerodrome conditions.

AFIS is a widespread practice throughout the world, and is also widely implemented across the EASA Member States. This is particularly the case in Scandinavian countries. In the case of Norway, information gathered indicated that in 2015 there were 33 airports where AFIS is provided, with about 181 000 movements. Spain is progressively opening the door to this type of service provision and as of September 2014, more than 30 airports were awaiting for the approval from the competent authority. In France, there are 67 aerodromes where AFIS is provided full time or in alternation with ATC service. Such alternation, which is established also at aerodromes in other States, follows differing criteria (e.g. weekends versus working days, different timeframes during the same day according to the type and demand of traffic or seasonal alternation).

#### 3.1.2.2. Current regulatory framework on AFIS

##### AFIS in the ICAO context

At international level, the relevant ICAO documentation, and in particular Chapter 4 of Annex 11 Chapter 4 and Section 9.1 of PANS ATM, both titled 'Flight Information Service', does not contain specific and comprehensive requirements for the provision of AFIS for binding or recommended application in accordance with the Chicago Convention. The sole ICAO document explicitly addressing this subject matter is the Circular 211-AN/128 'Aerodrome Flight Information Service' issued in 1988 (and never amended since), which includes guidance material of a non-binding nature, recommended for application at 'aerodromes used by international General Aviation where the type and density of traffic clearly do not justify the provision of aerodrome control service'. The same Circular recommends not to implement AFIS at aerodromes with international commercial air operations.

Consequently, when establishing and providing AFIS, States are only required to fulfil their obligations under the Chicago Convention with regard to FIS, which in some cases are not suitable or not specific enough for the aerodrome environment where AFIS is provided.



### The EUROCONTROL AFIS Manual

As a recognition of the need for better definition and harmonisation of the provision of AFIS at least in the European Civil Aviation Conference (ECAC) area, in 2010 EUROCONTROL published the EUROCONTROL Manual for Aerodrome Flight Information Service (AFIS). This document, which is also of non-binding nature, builds on ICAO subject matter provisions as well as on feedback from affected European stakeholders on the various aspects of AFIS provision, as a result of an extensive consultation process. The evidence in the EASA AFIS survey as in Section 3.1.2.3 showed that this document is considered as reference document for many aspects by some, but not by all, EU Member States when implementing and delivering such a service.

### AFIS in the EU legislation

As explained in Section 3.1.1, when the ATM/ANS Common Requirements Regulation comes into force, the technical requirements for the provision of ATS, and implicitly for the provision of AFIS, will be established in Section 1 of Subpart B of Annex IV, by reference to ICAO Annex 10 Volume II, Annex 11 and to the SERA Regulation. As such, the status quo compared to Regulation (EU) No 1035/2011 is maintained, with the lack of an explicit set of requirements addressing the various aspects of AFIS provision. The EU legislation will still refer to ICAO documentation which does not match the providers' needs or match actual practice in the European context.

In accordance with the applicable EU regulations, the certification of AFIS providers, being ATM/ANS providers, is mandatory (Regulation (EU) No 1035/2011), as well as their designation by the State concerned (Regulation (EC) No 550/2004). In addition, Article 5(4) of Regulation (EU) No 1035/2011 enables the competent authorities to grant derogations for the certification of AFIS providers under specified circumstances. The ATM/ANS Common Requirements Regulation maintains the obligation for the certification of AFIS providers, but enables an enhanced flexibility, by introducing the possibility for these providers to apply for a limited certificate or for a declaration, subject to specific circumstances and conditions. The derogations option is therefore removed.

#### 3.1.2.3. The EASA AFIS survey

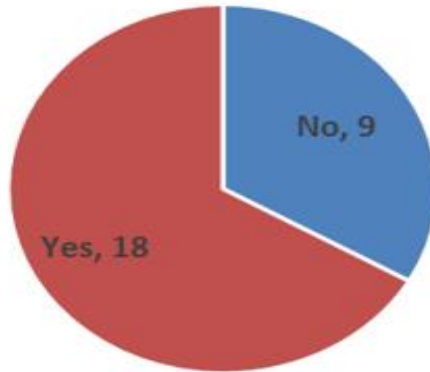
Within the activities of RMT.0464, and according to the principle of evidence-based legislation, in 2015 the Agency launched a survey (hereinafter referred to as 'the EASA AFIS survey') addressed to the members of the ATM/ANS and Aerodromes (ADR) TAG and Sub-SSCC, with the purpose of collecting additional information on existing practices and trends throughout the EASA Member States on the provision of AFIS. The questionnaire of the survey was built around the issues identified by RMG.0464, as well as on the outcome of Standardisation Inspections routinely performed by the Agency. The survey received responses from civil aviation authorities, associations, air navigation service providers, airport operators, trade unions, manufacturers and AFIS operators from 27 EASA Member States covering most of the European territory. The analysis of the feedback received by respondents supports this RIA and is published as information material on the Agency website along with the present NPA.

As evident in Figure 1, the survey indicated that the majority of the responding EASA Member States have implemented AFIS.





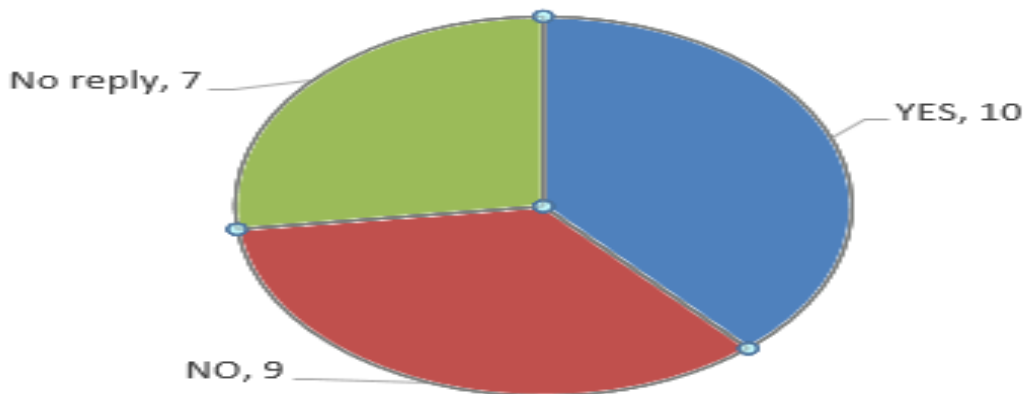
**Are there aerodromes in your State where Aerodrome Flight Information Service (AFIS) is provided?**



**Figure 1: Replies to the EASA AFIS survey**

Replies to the EASA AFIS survey show that the majority of AFIS aerodromes score medium/low traffic figures (hundreds or a few thousands movements per year). However, some aerodromes scored significant movements figures (even more than 54 000 movements on a yearly basis), but this was recorded at aerodromes with alternation of AFIS and ATC, without a specification of traffic figures related to timeframes when AFIS was provided. Figure 2 summarises replies from States which declared to have aerodromes with alternation between AFIS and ATC service.

**Alternation of AFIS/ATC**



**Figure 2: AFIS/ATC alternation<sup>17</sup>**

<sup>17</sup> The total of the States equals to 26, that is one less compared to the total States mentioned above (27). This is due to the fact that a respondent did not provide a detailed answer on the questionnaire (e.g. on the question under concern of Figure 2). The same reasoning applies to the following graphs from the EASA AFIS survey.



Many of the responses received indicated that, when alternation is established, ATC is usually provided when and where the traffic flow is expected to be significant and in presence of scheduled traffic, normally during the working days (frequently Monday to Friday), or in certain cases on a seasonal basis. AFIS instead is often provided during weekends or during those periods of the day when the traffic is expected to be low. From some responses it results that attention is paid to minimise fragmentation of periods and frequent alternation between the two services, in order to establish clarity and certainty on the ATS type provided at the aerodrome at any time.

Responses indicated that there are several States which have not established any limitation with regard to the type of operations and traffic which may operate at AFIS aerodromes (therefore supporting GAT IFR and/or VFR flights, commercial and non-commercial operations, military, etc.). In addition, traffic types do not seem to constitute a decisive factor or a limitation in making a decision to provide this type of ATS.

Responses received indicate that the interest and the expectations for the work undertaken under RMT.0464 to better define AFIS provision is high. Various categories of stakeholders highlighted a significant number of issues for which harmonisation is expected via EU legislation, amongst which e.g.:

- A clear definition of AFIS, with the basic elements of the service clearly established (provision of information and/or instructions, use of surveillance support, etc.);
- The definition of criteria for determining when an aerodrome has to be provided with AFIS;
- The definition of requirements for an (ad hoc) airspace designation and classification for the airspace surrounding the AFIS aerodrome;
- The definition of the Meteorological Services requirements specific for AFIS;
- The definition of communication requirements for AFIS, including recording and retention of records; and
- The definition of operational procedures for mixed IFR/VFR operations, for multiple IFR operations, for the interface with ground movements (vehicles, persons, aircraft).

Two respondents highlighted the fact that the introduction of a set of common AFIS requirements could increase pilots' awareness and certainty of the fundamental characteristics of the types of services and procedures in place at any AFIS aerodrome throughout the EU.

Some respondents invited the Agency to consider establishing EU rules only to the extent necessary to establish harmonisation concerning the fundamental elements of AFIS provision, and to leave the necessary flexibility to States and service providers to address the specific local aspects.

#### 3.1.2.4. Issues to be addressed

##### Issues with lack of harmonisation in EU legislation

The EASA AFIS survey revealed that, in the absence of specific and explicit ICAO and/or EU requirements, AFIS is currently provided on the basis of national legislation which a significant number of EU Member States have developed over the years. Such legislation extrapolate ICAO provisions about FIS and complement them with requirements which satisfy local national requirements or arrangements on AFIS provision. This situation leads to a wide diversity of practices



in various aspects, (e.g. operational procedures, typology of service provided to air traffic, operating hours, airspace and aerodrome structure, training and qualification of AFIS officers, equipment, etc.). The survey revealed that some EU Member States are deviating from the non-binding, but still significant, guidance provided by ICAO Circular 211-AN/128 on key topics, such as allowing international commercial aviation operations at AFIS aerodrome or, in the case of 4 States, allowing AFIS operators to issue instructions to aircraft and vehicles on the ground.

**4. Has your State established criteria for determining when an aerodrome has to be provided with AFIS, when with ATC or when no ATS has to be established?**

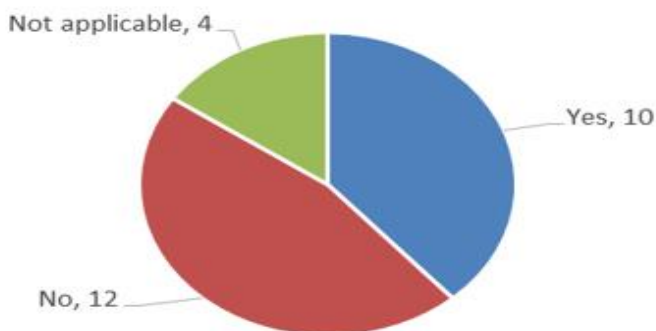


Figure 3: Criteria to determine the ATS type at aerodromes

**6. Has your State established specific procedures for AFIS provision, other than what in the applicable ICAO Annex 11 and PANS ATM requirements?**

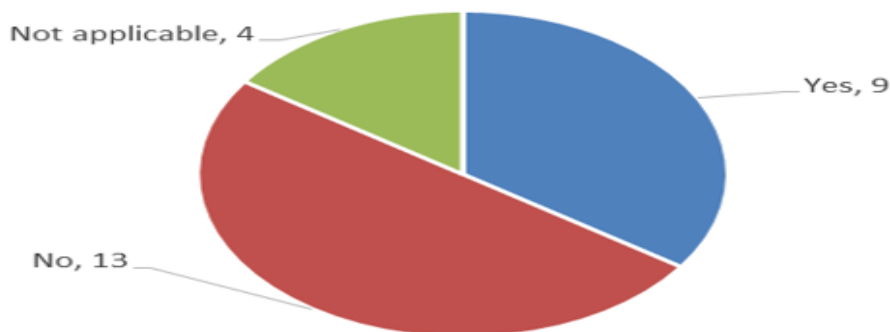


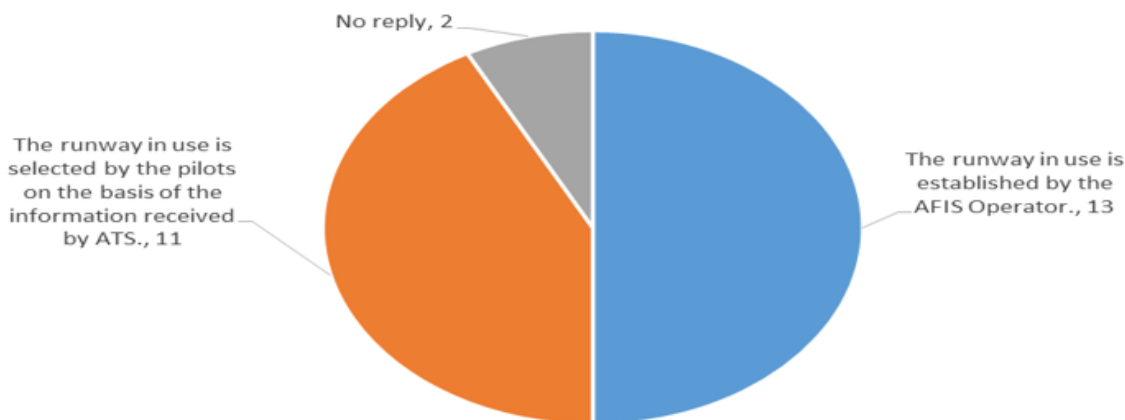
Figure 4: National AFIS regulation other than ICAO

The situation described above shows that AFIS provision meets neither the principal objectives established in Article 2 of the Basic Regulation, such as to establish and maintain a high uniform level of civil aviation safety in Europe and to assist Member States in fulfilling their obligations under the Chicago Convention, by providing a basis for a common interpretation and uniform implementation of its provisions, nor the safety principles and objectives, in particular those established in the Essential Requirements in Chapter 2.(c) of Annex Vb.

**Issues with operational procedures**

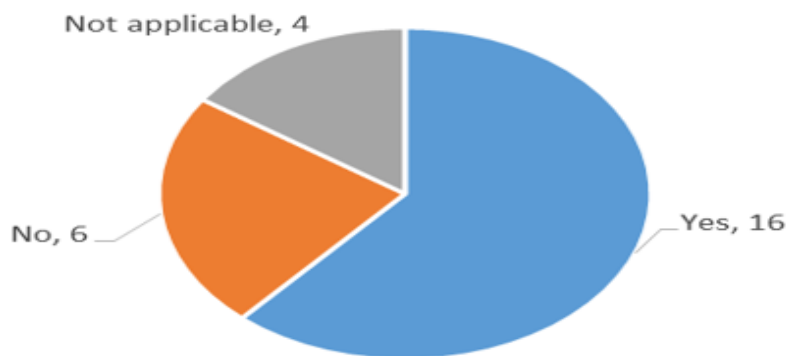
The fragmented AFIS provision often shows inconsistencies and gaps across Member States that could play a very important role in e.g. interoperability and communication. For instance, the type of services provided to flights operating cross-border flights at AFIS aerodromes may differ, and sometimes significantly, on the basis of the implementation of the AFIS model established in the national acts. There is evidence from the EASA AFIS survey that in some cases such differences are significant, as for the responsibility for the selection of the runway in use (See Figure 5), or for the facilities for the aeronautical mobile service (See Figure 6) or of the actions that AFIS Officers are empowered to take (issuing information or instructions and clearances to aircraft on the manoeuvring area) when providing the service. These variations might reduce the pilots’ awareness, in particular for the type of ATS provided (ATC or AFIS), and potentially represent a serious risk to safety, in particular when the aerodrome supports international aviation operations, and in the absence of clear and explicit requirements on the notification of the appropriate aeronautical information concerning the AFIS provision (See Section 3.1.2.5 Safety risk assessment).

**7. Which of the two following practices is applied at AFIS aerodromes in your State to select the runway in use?**



**Figure 5: Procedure for selection of runway at AFIS aerodromes**

**13. Has your State established requirements for the aeronautical mobile service (air-ground communication) facilities for AFIS units?**



**Figure 6: Aeronautical mobile service facilities**



### Issues with EASA Standardisation inspections — Compliance with EU legislation

In this regulatory context, AFIS is regarded as an area of concern also on the basis of the feedback received from EASA Standardisation inspections. In 5 EASA Member States, it was found that AFIS providers were neither certified nor declared as ATS providers, as it should be in accordance with the applicable EU legislation (the Basic Regulation, Regulation (EC) No 550/2004, and Regulation (EU) No 1035/2011); consequently, oversight was not conducted. Other findings against the aforementioned Regulations were issued, concerning the missed designation of AFIS providers to render services within a specified portion of airspace (the ATZ associated to the aerodrome), the lack of demonstration of English language proficiency of AFIS operators where AFIS was provided in that language, the authority given to AFIS units to issue instructions (typical for ATC provision) to aircraft on the ground.

The latter situation described is neither compliant with the FIS principles and requirements established in Annex 11, nor with Article 3(1) of Regulation (EU) 2015/340<sup>18</sup> stipulating that ATC service, which includes the issuance of clearances and instructions, shall only be provided by ATCOs qualified and licensed in accordance with the requirements of that Regulation.

Feedback from EASA Standardisation inspections indicates that there is a lack of a more robust EU regulatory framework and/or guidance concerning the provision of AFIS.

### Issues with the appropriate selection of aerodromes ATS

In consideration of the ANSPs' concerns about the costs for the implementation of ATC provision, AFIS could be regarded as a less burdensome option for providing aerodrome ATS due to the reduced number of obligations and to the fewer resources and less effort required compared to an ATC service. An example is the significant difference in the requirements for qualification of staff (ATCO addressed in details by Regulation (EU) 2015/340 vs AFIS officers addressed only in principle by Regulation (EU) No 1035/2011, and consequently by local, often very diverse directives) providing such services. In the absence of a common regulatory framework, there is the risk that AFIS, not being harmonised at EU level, is defined and provided on the basis of local needs and practices, driven primarily by economic factors rather than by safety objectives.

#### 3.1.2.5. Safety risk assessment

For the purposes of this RIA, the Agency has analysed the available data<sup>19</sup> of occurrences reported at 22 aerodromes within the EASA Member States where AFIS is provided, over the last 5 years. This sample of 22 aerodromes was selected based on the feedback received with the EASA AFIS Survey, with the aim of establishing a balanced representation of different AFIS operations and considering specific characteristics (e.g. traffic load, typology of flight operations, geographical scope); some of these aerodromes are with mixed ATC/AFIS operations.

<sup>18</sup> 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://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1467201985014&uri=CELEX:32015R0340>).

<sup>19</sup> Data extracted from the European Central Repository (ECR). It is to be noted that pursuant to Article 8(2) of Regulation (EU) No 376/2014, since 15 November 2014 Member States are obliged to insert relevant data on occurrences into this repository. The list of accidents and serious incidents were completed with data from the EASA database, which resulted in two additional serious incidents added ('Incident between an airliner and airport maintenance vehicle at Kuusamo airport on 29 January 2003' (Ref. C 2/2003 L) and 'Serious incident at Kittilä airport on 4 January 2005' (Ref. B 1/2005 L)).



The analysis focused only on occurrences related to ATM/ANS-related aspects. A total of 234 occurrence reports were detected, subdivided as follows by their severity: 1 accident, 5 serious incidents, 227<sup>20</sup> incidents or other occurrences.

From the analysis, it resulted that:

- the most frequent type of occurrence reported at those AFIS aerodromes were near collisions and runway incursions;
- a significant amount of events related to aerodrome and/or ATM/ANS equipment failures were recorded in the occurrences analysed. In total 29.5 % of reports contained some kind of ground equipment failure, among which the communications equipment account for more than 10 % of the cases;
- the provision of information to pilots was also pervasive in the reports, and together with the flight crew communications and flight crew following ATM procedures and clearances issued, these events occurred in 13,3 % of the reports. Events reported in accidents and serious incidents showed that ATM-flight crew coordination, flight crew's knowledge of services provided and the related procedures were contributing factors in some of those events. In particular, it was found that the pilot did not follow AFIS procedures either due to lack of knowledge of the procedure (e.g. landing without "runway free" message from AFIS officer), or due to erroneous assumption from the pilot (e.g. assumed that he got a clearance);
- even though the percentage of events related to AIS provision is limited in the sample, it was found that AFIS-related procedures did not reach the pilot, either because:
  - the pilot did not check the AIP or other relevant Aeronautical Information (e.g. NOTAMs concerning the AFIS aerodrome); and/or
  - the crew manuals did not appropriately reflect the AFIS procedures; and/or
  - the procedures were published in the national AIS only in the local language.
- Communication issues were found also in the review of some serious incidents, where the lack of standard phraseology, inadequate communication with AFIS unit (e.g. not provided all required information such as RWY to land), or missed correction of incorrect read-back or lack of clarification of unclear communications upon request from the pilot, played a role.

It is worth noting that among the aerodromes selected, the reporting culture into ECR plays a significant role. 5 out of 22 aerodromes did not report any occurrence, 9 aerodromes reported 19 occurrences, while 8 aerodromes reported 213.

The safety risk analysis shows that there is no impelling safety driver to regulate AFIS; however, it shows that several occurrences are linked indirectly or directly to the current AFIS requirements, and it also indicates that harmonisation may have helped in some circumstances (e.g. setting up pilot expectations about the received service). As also recommended by the Finnish Investigation Commission in the conclusions of Investigation Report C 2/2003 L, a clear definition and harmonisation of AFIS throughout EASA Member States would be required to improve flight safety.

<sup>20</sup> For those incidents and other occurrences, included in this figure, reported at aerodromes with mixed ATC/AFIS operations, the information in the ECR does not specify if the occurrence occurred when AFIS was provided.



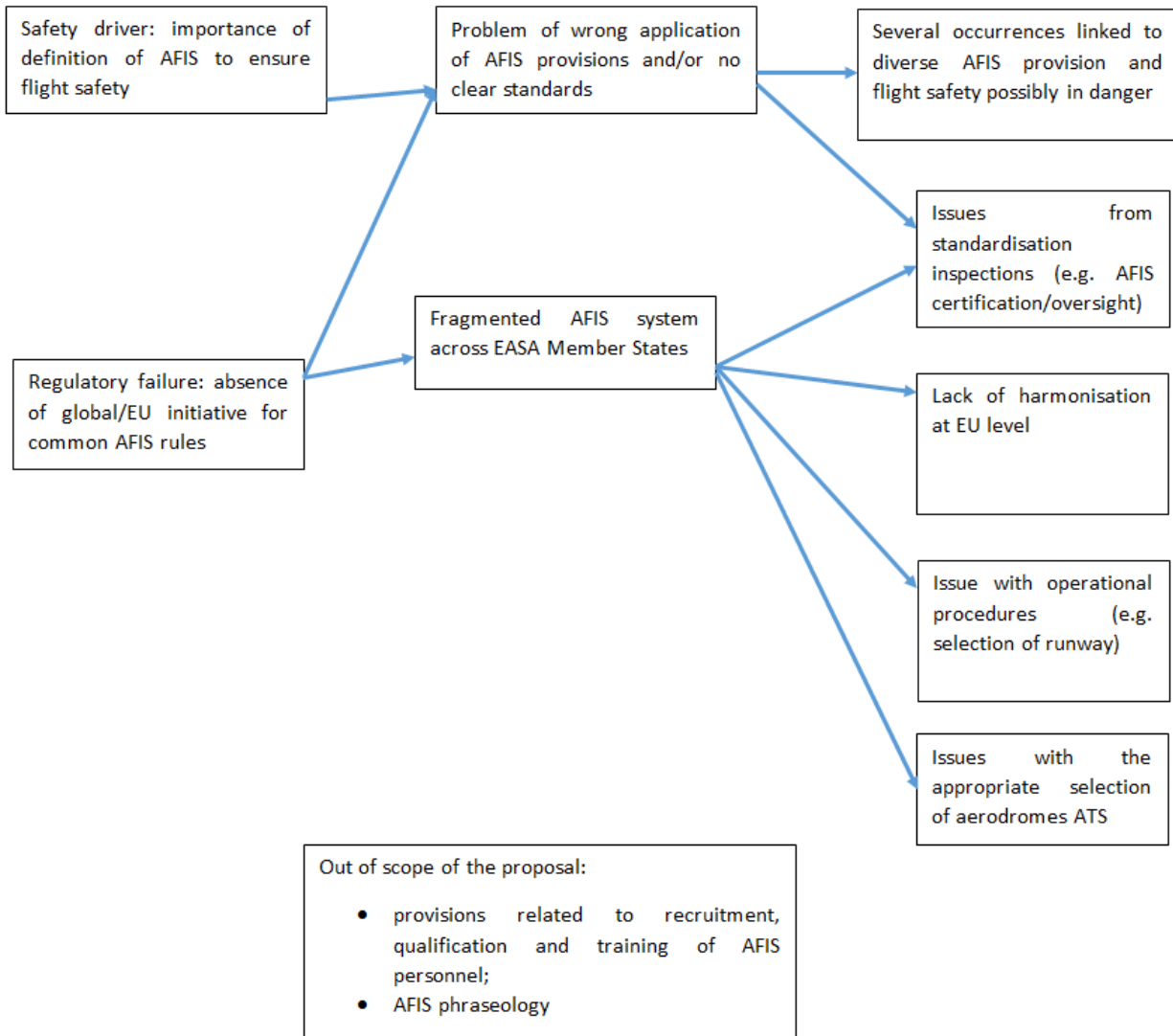
**3.1.2.6. Who is affected?**

- The Agency, as being responsible for the oversight of competent authorities;
- Member States as they are responsible for the fulfilment of the obligations towards the Chicago Convention, for the application of the relevant EU legislation and, in this very case, for having established national legislation to address AFIS provision;
- Competent authorities as they are responsible for the enforcement and oversight of the national and/or EU legislation concerning AFIS and of the regulated subjects;
- Air navigation service providers as they have to establish all the arrangements to deliver AFIS in accordance with the applicable national and/or EU legislation. This includes the availability of system support, the definition of procedures, personnel qualification and training, etc.;
- ATS personnel (AFIS officers as they have to be recruited, qualified and trained to operationally provide AFIS; ATCOs and FIS officers as they have to be trained to operationally interact with AFIS units);
- Aircraft operators (commercial, freight, business, General Aviation, etc.) as they are responsible for the aircraft to which AFIS is provided. The service level and the related arrangements are relevant in order to elect if to operate at AFIS aerodromes;
- Pilots as they are the direct beneficiary of AFIS for the safe and expeditious conduct of their flights; they interact with AFIS units;
- Aerodrome operators as the decision of providing AFIS and the application of the related requirements affect the aerodrome configuration and development, at organisational and operational level;
- Passengers (of commercial aviation operations at AFIS aerodromes) as they could benefit from a safer and more efficient service, as well as from the extension of the aviation system and therefore the mobility of the population;
- Local communities as the definition of a common EU AFIS regulatory framework might have an impact on the extension of the aviation system and subsequently, by supporting the implementation of AFIS aerodromes, on the economy of the areas surrounding such aerodromes.

**3.1.2.7. Problem tree**

The following problem tree helps visualising the identified problems, their underlying drivers and likely consequences.







### 3.1.2.8. How could the issue/problem evolve

If the regulatory framework is not changed, the situation could evolve as follows:

- In the absence of the definition of a clear and proportionate EU regulatory framework, and in the continuing absence of explicit ICAO provisions the provision of AFIS throughout the EU would not be harmonised.
- Under the present conditions, the certification and oversight of AFIS would continue to differ across EASA Member States, based on sometimes differing national legislation. This is due to a lack of common understanding as to what constitutes AFIS.
- In the absence of a defined safety regulatory framework which explicitly recognises AFIS as an ATS with its own peculiar characteristics and requirements, the decision as to whether to implement AFIS or ATC, and the related conditions, could be taken by the ATS provider and subsequently endorsed by the competent authority based primarily upon economic rather than upon safety aspects. This is a concern as from the provider's perspective, ATC implementation is a more burdensome and potentially more expensive proposition compared to AFIS.
- Issues related to the lack of harmonisation in operational procedures would remain or, in case of an increase of traffic at AFIS aerodromes, could become more frequent, in particular in case of international flights to AFIS aerodromes, as pilots could not be aware of the specificities of a local AFIS provision (e.g. runway in use; air-ground communication, responsibilities for maintaining separation on the ground). On the basis of the safety risk assessment in Section 3.1.2.5, the identified safety issues linked to AFIS would persist and potentially lead to the detriment of flight safety operations.

### 3.1.2.9. AFIS in third countries

According to the information gathered, AFIS or similar types of services, which may widely vary, are implemented in over 70 countries in the 5 continents around the world. Some examples:

- Some States have well-defined airspace ATZ, TIZ or even CTR. Some have no airspace designated for AFIS aerodromes. The airspace size varies from about 5 NM in diameter and 1 500 ft high to 60 NM miles in radius and up to 10 000 ft high;
- Airspace classification used ranges from G and F to E and even D;
- The call signs for AFIS aerodromes used are, variously, 'RADIO', 'INFORMATION' or 'AFIS';
- Some (like the US, Canada and Japan) do not even call it AFIS but use other names e.g. Flight Service Stations (FSS);
- The traffic served ranges from only unscheduled private VFR to all types of traffic including international scheduled IFR passenger traffic and even military traffic;
- Service varies from only providing meteorological information to providing meteorological information, traffic information, navigational assistance and suggestions and advice (briefly described);



- Some have minimum equipment, grass or gravel runways, no approach or navigational aids, no lights and only HF radio. And some have ILS and other precision approach instruments, hard surface runways and radar/surveillance equipment for provision of AFIS with radar;
- Training of AFIS officers can vary in length from 2 weeks to 3 years. Some include simulator and some others only theory;
- Some States have established a licensing scheme for their AFIS officers with ratings and well-published training schemes. Some have some type of certificate of competence and some have nothing at all.

Recently, some States, such as the United States and Canada, have been consolidating flight services into large regional centres, replacing former local flight service stations with remote communications outlets (RCOs) connected to the centres.

Hereinafter, three descriptive examples of how aerodrome FIS are established in non-EASA States.

#### **Indonesia**

Indonesia has 100 AFIS aerodromes serviced by 418 licensed AFIS officers. AFIS aerodromes have no designated airspace but work in surrounding airspace that is now classified F. Indonesia is working towards creating ATZ with G airspace as a consequence of getting findings in ICAO audits. The call sign for the AFIS stations is 'Information'.

Indonesia is currently modernising its AFIS service, which today is conducted at minimum equipped airfields with only HF radio and very little regulation. It is planned to introduce the Eurocontrol AFIS manual as national subject matter regulation.

#### **United States**

The USA has 5 AFIS aerodromes. In the USA, the unit providing such service is named FSS — flight service station.

An FSS is an air traffic facility that provides information and services to aircraft pilots before, during, and after flights, but unlike ATC, is not responsible for giving instructions or clearances or providing separation. They do, however, relay clearances from ATC for departure or approaches. The people who communicate with pilots from an FSS are referred to as flight service specialists.

The services offered by typical FSS services may include:

- providing preflight briefings including weather and notices to airmen (NOTAMs);
- filing, opening and closing flight plans;
- monitoring navigational aids (NAVAIDs);
- collecting and disseminating pilot reports (PIREPs) and airport surface weather observations;
- offering traffic advisories to aircraft on the ground or in flight;
- relaying instructions or clearances from air traffic control;
- relaying information from or about airborne aircraft to their home bases, military bases or homeland security;
- providing weather advisories to aircraft inflight;



- initiating search and rescue on missing VFR aircraft; and
- providing assistance in an emergency.

Flight service stations also operate at mandatory frequency airports to help coordinate traffic in the absence of ATCOs, and may take over a control tower frequency at a controlled airport when the tower is closed.

In most cases, it is possible to reach FSS either by radio in flight, or by telephone on the ground.

The US also provides something called RAA (Remote Airport Advisory) and RAIS (Remote Airport Information Service). Both provide weather services and cannot be compared with what in Europe is intended to be defined as AFIS.

### Canada

Canada has established units named flight service stations (FSS) to provide:

- aerodrome advisory services (AAS);
- vehicle control services;
- ATC support;
- local weather and aeronautical information;
- surface weather observation;
- equipment monitoring; and
- emergency services

A typical example of an FSS is a station in Class E airspace surrounded by uncontrolled airspace with a mix of commercial and General Aviation traffic. The FSS often has a control zone associated.

Radar/MLAT is utilised at these stations, where available.

## 3.2. Objectives

### General objective

The overall objective of the EASA system is to establish and maintain a high uniform level of civil aviation safety in Europe (Article 2(1) of the Basic Regulation); this proposal will contribute to this overall objective by addressing the issues outlined in Section 3.1.

### Specific objectives

In the light of the mandate of the EU legislator concerning ATS, there is a need to define explicit and fundamental requirements for AFIS in the EU context, by setting an efficient, effective and proportionate framework consistent with the FIS principles established by ICAO and by the existing EU legislation (e.g. SERA).

More specifically, the objectives are to:

- establish clarity as regards the rules applicable to AFIS;
- ensure a sufficient level of harmonisation for AFIS provision throughout the EASA Member States;



- ensure consistency between the proposed AFIS requirements and the existing applicable ICAO provisions and EU legislation;
- establish a proportionate and cost-efficient framework, applicable to different aerodromes with different types of operating traffic; and
- maintain high aviation safety level by ensuring adequate implementation of AFIS provisions linked to safety and tackling the issues identified by standardisation inspections.

### 3.3. Policy options

**Table 1 — Options considered**

<b>Option No</b>	<b>Short title</b>	<b>Description</b>
0	No policy change	Baseline scenario (no change in EU rules; risks remain as outlined in the issue analysis).
1	Essential and flexible AFIS rules	Definition of AFIS and its essential requirements consistent with existing ICAO ATS principles and EU legislation and practices, while ensuring certain flexibility
2	Comprehensive and prescriptive AFIS rules	Definition of AFIS and its complete mandatory requirements consistent with existing ICAO ATS principles and EU legislation

*Note: It is important to notice that the regulatory proposal in this NPA neither includes detailed and ad hoc requirements on the recruitment, qualification and training of AFIS officers, as they are not within the scope of RMT.0464, nor establishes a specific air–ground phraseology for the provision of AFIS, which should be further considered by SERA regulatory activities. It is recalled that for the recruitment, qualification and training of AFIS officers, the general provisions in the ATM/ANS Common Requirements apply.*

#### **OPTION 0 — NO POLICY CHANGE — BASELINE SCENARIO**

No specific requirement for the provision of AFIS would be proposed, therefore a common description of and regulatory framework for AFIS in the EU context would not be established. AFIS would keep being provided on the basis of the general ICAO FIS principles, which are not intended to fit in the aerodrome context. In general, AFIS would be provided in accordance with national legislations which are not harmonised at EU level with regard to various conceptual, organisational and operational aspects.

#### **OPTION 1 — DEFINITION OF AFIS AND ITS ESSENTIAL REQUIREMENTS CONSISTENT WITH EXISTING ICAO ATS PRINCIPLES AND EU LEGISLATION AND PRACTICES, WHILE ENSURING CERTAIN FLEXIBILITY**

A definition of AFIS would be proposed, together with the basic organisation and technical requirements to specifically address the provision of FIS at the aerodrome and in the airspace in its vicinity. Such requirements would be consistent and establish an explicit alignment with the existing ICAO provisions on FIS, as well as compliance with the EU legislation in force or under development (e.g. SES Framework, ATM/ANS Common Requirements, SERA). The regulatory proposal would take also into account the results of the EASA AFIS survey, with the aim of harmonising only the



fundamental elements of the service, while ensuring the necessary flexibility to reflect the various typologies of AFIS operations in place throughout the EASA Member States. Furthermore, GM would be proposed, representing the possibility to establish aeronautical stations (UNICOM) not providing ATS but facilitating aviation operations at aerodromes where no ATS is established. The proposal aims at establishing clarity on the options available when selecting the most appropriate arrangement (ATC, FIS, AFIS or aeronautical stations not providing ATS).

### OPTION 2 — DEFINITION OF AFIS AND ITS COMPLETE MANDATORY REQUIREMENTS

A definition of AFIS would be proposed, together with a comprehensive set of prescriptive organisation and technical requirements to specifically address the provision of FIS at the aerodrome and in the airspace in its vicinity. Such requirements, consistent with the existing ICAO provisions on FIS, as well as on the EU legislation in force or under development (e.g. SES Framework, ATM/ANS Common Requirements, SERA), would be as prescriptive as possible, in order to establish a unique EU 'AFIS model'. Such model would be implemented at any aerodrome where the Member State has decided that ATS, but not ATC, is to be provided, regardless of the local characteristics (e.g. typology and traffic demand, aerodrome layout, operational hours).

## 3.4. Analysis of impacts

### 3.4.1. Safety impacts

#### Option 0

The potential to generate safety risks as identified in Section 3.1.2.5 (Safety risk assessment) would remain or even increase, with a possible growth of AFIS flights.

#### Option 1

The harmonisation of AFIS requirements would contribute to the improvement of flight safety, in particular with regard to the explicit definition and description of various organisational and operational aspects of the service (issuance of appropriate information, air-to-ground communication procedures, aeronautical mobile service requirements, inclusion and appropriate use by pilots of AFIS related information in AIS) which nowadays are not uniform and therefore represent a safety concern, in particular for cross-border flights.

#### Option 2

The safety impact would be similar to that of Option 1. However, with an even more defined and prescriptive set of requirements, room for local interpretations and implementation of specific organisational and operational aspects linked to safety would not be allowed.

**Table 2 — Safety impacts per option**

Criteria	Option 0 — Take no action	Option 1 — Essential and flexible AFIS rules	Option 2 — Comprehensive and prescriptive AFIS rules
Safety	0/-	+	+



**3.4.2. Environmental impacts**

Not relevant.

**3.4.3. Social impacts**

When assessing the social impact of the three given options, it is to be considered that this regulatory proposal does not include detailed provisions on the recruitment, qualification and training of AFIS personnel, as these fields are not within the scope of RMT.0464. However, the ATM/ANS Common Requirements Regulation includes a generic obligation for providers to recruit, qualify and train personnel employed in the provision of the services, which include also AFIS.

**Option 0**

No impacts are expected. The situation would remain as is today.

**Option 1**

The introduction of explicit AFIS requirements might support the harmonised definition of criteria for the selection and recruitment of AFIS personnel, as well as the establishment of consistent qualification and training paths. The flexibility offered by the proposed provisions would allow the AFIS providers to tailor the qualification and training paths to the specific local needs. More in general, the definition of a regulatory framework would contribute to raising the recognition at EU level of AFIS personnel as ATS professionals.

**Option 2**

The introduction of explicit AFIS requirements might support the better definition of criteria for the selection and recruitment of AFIS personnel, as well as the establishment of consistent qualification and training paths. The rigidity of the proposed 'EU AFIS model' would support the development of similar schemes and, consequently, theoretically support the mobility of AFIS officers. As for Option 1, the definition of a regulatory framework would contribute to raising the recognition at EU level of AFIS personnel as ATS professionals.

On the other hand, the burden on providers to comply with the prescriptive regulatory framework could lead to the termination of the provision of AFIS at certain aerodromes, with possible reduction of air traffic and of the associated jobs.

**Table 3 — Social impacts per option**

Criteria	Option 0 — Take no action	Option 1 — Essential and flexible AFIS rules	Option 2 — Comprehensive and prescriptive AFIS rules
Social	0	+	0/+

**3.4.4. Economic impacts****Option 0**

No major impacts are expected.



## Option 1

### Competent authorities

The introduction of a common set of EU AFIS requirements would imply initial costs for the competent authorities which will have to make available appropriate resources and manage the administrative burden of certification and oversight of AFIS providers in accordance with a new regulatory framework; such expected burden would be reduced if the national legislation on AFIS is already aligned with the ICAO principles which drive the proposed rules and if the certification and oversight of such service is already routinely conducted, in accordance with the applicable EU legislation.

### AFIS providers

Assessing the economic impacts of this option on AFIS providers is challenging, in particular in consideration of the existing differences in specific characteristics such as the typology and numbers of traffic demand, the type of aircraft operations, the aerodrome layout. Another factor which would make the assessment variable is the existing national legislation and arrangements for AFIS. The larger the alignment of the existing national legislation with the regulatory proposal, which includes flexible arrangements, the less significant the economic impact for the AFIS provider to establish compliance with the proposal. Moreover, a change from the national legislation could imply costs for the revision of operation manuals and training courses and material for AFIS officers. In general, a variable economic impact would be expected in particular as regards establishing compliance with the proposed ATS organisation requirements (e.g. fixed and mobile communication service, meteorological requirements). However, it is recalled that in accordance with Regulation (EU) No 1035/2011, AFIS providers are already required to be certified (or to apply for derogations in accordance with established provisions) and to provide AFIS in accordance with applicable ICAO working methods and procedures, which are at the basis of this regulatory proposal. Based on the EASA AFIS survey, there is evidence of an existing significant level of compliance with those ICAO provisions throughout EASA Member States; therefore the overall economic impact should be limited for AFIS providers.

### Aircraft operators

It is unlikely that aircraft operators would suffer a negative economic impact by the requirements in the proposal, in particular as regards the increase of air navigation charges which should not be modified as a result of the introduction of this regulatory proposal, unless the current AFIS provision differs significantly from the ICAO FIS and from the EU legislation applicable; in this case, the necessary investments to ensure compliance might lead to an increase of the air navigation charges.

The establishment of a flexible regulatory framework, applicable at multiple typologies of aerodromes, could encourage the further expansion of AFIS provisions throughout the EASA Member States, as also evidenced by the feedback received via the EASA AFIS survey. This could create the conditions for the economic development of the regions concerned, which would benefit from the existence of an operating logistic infrastructure, with the potential to favour the economic development of surrounding communities and with the related generation of new jobs.

It may have a positive economic impact in those EASA Member States where no AFIS is provided, by giving the opportunity to replace ATC with AFIS where so considered advantageous (e.g. at aerodromes with limited traffic demand and low complexity) and acceptable from a safety perspective. This would lower the costs for the service provision and could, as an effect, lower also air navigation charges for



aircraft operators (commercial, freight, business, General Aviation, etc.), with possible economic benefits for passengers.

### Option 2

The economic impact for the competent authorities would be the same as that of Option 1.

Compared to Option 1, as regards AFIS providers, in presence of a comprehensive and prescriptive regulatory framework, the economic impact could be more negative as much as the current national AFIS regulation deviates from the current ICAO AFIS provisions. Establishing compliance with this regulatory package could represent a relevant burden for some AFIS providers, which could therefore decide to terminate the provision of such service.

The economic impact for aircraft operators could be worse than that of Option 1, due to the possible increase in the air navigation charges which could result from the necessary investments the AFIS provider would need to make to establish compliance with the full set of rules (e.g. aeronautical fixed/mobile service, certified meteorological information).

The economic impact of the establishment of a comprehensive and prescriptive AFIS regulatory framework could be twofold: on the one hand it would establish clarity on the applicable requirements and as a result encourage the further expansion of AFIS provisions, with the inherent benefits for the aviation system and, therefore, for the economy; on the other hand, in presence of AFIS providers which would terminate the service provision due to the excessive burden introduced by the proposal, the effects on the local economies would be detrimental (limitation/closure of AFIS aerodrome operations, negative impact on companies supporting the aerodrome, consequent loss of jobs).

More negative economic impacts are expected, compared to Option 1.

**Table 4: Economic impacts per option**

Criteria	Option 0 — Take no action	Option 1 — Essential and flexible AFIS rules	Option 2 — Comprehensive and prescriptive AFIS rules
Economic	0	-/+	-

#### 3.4.5. General Aviation and proportionality issues

##### Option 0

The provision of AFIS is based on national legislation, which is focused on the local characteristics, operational needs and capabilities of aerodromes concerned.

General Aviation would keep operating as with the current national regulatory framework; for local operations, it would have no impact, while for non-resident pilots, in particular in case of cross-border flights, the lack of harmonisation in operational procedures and information dissemination at the various AFIS aerodromes could represent an operational issue (in addition to the safety issues outlined in Section 3.1.2.5).

##### Option 1

In presence of the various organisational and operational factors affecting the establishment of AFIS provisions (different aerodromes layouts, different typology of aircraft operations VFR/IFR, national





international flights, commercial, non-commercial, military, General Aviation, gliders, balloons, etc.), the inherent flexibility of the proposal would support the principle of proportionality.

The proposal would neither pose any limitation for the General Aviation operations, nor restrict access to aerodromes or to ATS. The rationale provided under the ‘Economic impact’ of Option 1 concerning aircraft operators is applicable to General Aviation as well, being a category which makes extensive use of AFIS aerodromes. In case of an increase of the air navigation charges due to the necessary investments to meet the proposed AFIS requirements, the impact on General Aviation would be proportionally higher than that on CAT, as the economic onus is on the pilots who would not get any revenue from the flight. On the contrary, the harmonisation introduced by the establishment of essential common rules would facilitate the understanding of the General Aviation community of what AFIS principles and procedures are to be expected at any of such aerodromes. Additionally, the introduction in GM of the UNICOM concept would support the existence of aerodromes where no ATS is established, but where the Member State could allow a degree of facilitation for local operations, which are expected to be mainly General Aviation operations.

### Option 2

The comprehensive and prescriptive nature of the requirements would have a negative impact on the principle of proportionality as all providers would be required to comply with the complete framework, regardless of the characteristics and typology of operations at the aerodromes concerned.

As with Option 1, General Aviation would benefit from the even greater harmonisation of AFIS provision. However, as discussed under the ‘Economic impact’, the implementation of this Option could represent a ‘showstopper’ for those providers which could not afford or not consider cost-effective the provision of AFIS at certain aerodromes. This would have a negative impact on the General Aviation operations because it could lead to the lack of ATS at such aerodromes. In addition, the possible increase of air navigation charges to comply with the requirements, which based on the scope and the binding nature of the proposal would be expected to be higher and more likely than with Option 1, would generate a detrimental economic impact on General Aviation.

**Table 5: General Aviation and proportionality impacts per option**

Criteria	Option 0 — Take no action	Option 1 —Essential and flexible AFIS rules	Option 2 — Comprehensive and prescriptive AFIS rules
General aviation and proportionality	0	+	-

#### 3.4.6. ‘Better regulation’ and harmonisation impacts

##### Option 0

With the current situation and in the absence of a common EU framework explicitly recognising and addressing the provision of AFIS, such service would keep being provided on the basis of the national interpretation of ICAO principles on FIS, which in many cases resulted in lack of harmonisation in various aspects throughout the EASA Member States. With the introduction of this regulatory proposal for PART-ATS, transposing the relevant provisions of ICAO Annex 10 Volume II, Annex 11 and PANS ATM into the EU regulatory framework but without an explicit reference to AFIS, there is the risk that the existing national legislation on AFIS is not aligned with the EU ATS principles. Moreover, the lack of



an explicit common EU regulatory framework would prevent establishing clarity with regard to the certification and the oversight of AFIS providers on the basis of the applicable EU legislation.

### Option 1

Bearing in mind the lack of ICAO SARPs with regard to AFIS, the proposal would define at least a set of high-level AFIS requirements, established within the scope of the FIS. It would accomplish the regulatory mandate of the Basic Regulation to establish a common regulatory framework for ATS in accordance with the relevant Essential Requirements in Annex Vb 2(c). All affected stakeholders (in particular competent authorities, ATS providers, and aircraft operators) would benefit from the harmonisation of AFIS for which different interpretations have been given so far. Said differentiation leads to implementation sometimes partially divergent from the ICAO FIS principles which instead are fully followed by the proposal. The harmonisation introduced with these common rules would facilitate the understanding of what AFIS principles and procedures are to be expected at any of such aerodromes (e.g. determination of the runway in use; air-ground communication).

The proposal would establish the essential elements of the common EU regulatory framework for the provision of AFIS, and at the same time grant certain flexibility to accommodate local characteristics and needs. It would be coherent with the other ATS requirements resulting from the transposition of the ATS-relevant ICAO material, and in particular with the principles of the FIS provision. Member States and other affected stakeholders would benefit from the clarity on the options available to select the type of ATS at aerodromes, including the explicit recognition of the possibility to establish arrangements facilitating aviation operations without providing ATS (UNICOM aeronautical stations). The Agency and the national competent authorities would benefit from the definition of a coherent set of provisions for activities concerning the standardisation, certification and oversight of AFIS under the EU regulatory framework. AFIS providers would benefit from the definition of a defined set of rules to implement and deliver this service, which at the same time stipulates the essential mandatory elements and allows for the flexibility to accommodate specific local needs. Pilots will benefit from a unique definition of the fundamental characteristics of AFIS, which would enable a common awareness of the services provided and support the harmonisation of operational procedures at EU AFIS aerodromes.

On the basis of the information gathered via the EASA AFIS survey, the proposed measures should not prove too burdensome for the affected stakeholders in the majority of the EASA Member States. They would be required to assess if their national legislation on AFIS is aligned with the EU AFIS requirements (built upon the ICAO principles already applicable) and to undertake appropriate action, as necessary. This could include the initiative to modify the national arrangements for AFIS provision when they would not be compliant with the general requirements in the proposal, and to request the competent authority (-ies) and the affected AFIS providers to act accordingly.

EASA Member States where, for the time being, AFIS is not provided may seize the occasion of the additional clarity and consistency brought by the requirements included in the proposal and consider opting for the implementation of AFIS instead of ATC at specific aerodromes, where they have determined that ATS is to be provided incurring less operational costs.



## Option 2

As with Option 1, the proposal would define AFIS and formally and explicitly recognise it as a subset of FIS, as well as accomplish the regulatory mandate of the EASA Basic Regulation to establish a common regulatory framework for ATS in accordance with the relevant Essential Requirements in Annex Vb. In this respect, the impact on all affected stakeholders (in particular competent authorities, ATS providers, Aircraft operators) would be similar.

The comprehensive scope of the provisions and their prescriptive nature would establish a well-defined regulatory framework for the provision of AFIS, coherent with the relevant EU regulations and ICAO ATS principles; this would definitely contribute to its harmonisation and represent a detailed guidance for Member States, competent authorities and service providers in the activities of designation, certification, oversight, standardisation and provision of such service. As with Option 1, pilots will benefit from an established clarity on AFIS.

The prescriptive nature of the proposal could create difficulties in accommodating specific local characteristics and needs. Such lack of flexibility could result in the imposition of a significant administrative and economic burden to AFIS providers, in particular at small aerodromes or at aerodromes with reduced/local traffic, to meet all the proposed requirements. A consequence of this could be that AFIS is no longer provided at those aerodromes.

As with Option 1, EASA Member States would be required to assess if their national legislation on AFIS is aligned with the EU AFIS regulatory framework and to undertake appropriate action, as necessary. In consideration of the comprehensive and prescriptive nature of the provisions, it could be possible that the impact on the existing national regulatory systems would be significant, and that would require Member States to introduce significant changes to the existing AFIS arrangements and legislation, when these would not be compliant with the general requirements in the proposal. The transitional costs to achieve this level of harmonisation could be non-commensurate with the potential benefits; in this case, the principles of 'better regulation' would not be respected.

**Table 6 — 'Better regulation' and harmonisation impacts per option**

Criteria	Option 0 — Take no action	Option 1 — Essential and flexible AFIS rules	Option 2 — Comprehensive and prescriptive AFIS rules
'Better regulation' and harmonisation	-	++	0/+

### 3.4.7. Open questions to stakeholders

In order to enable an even more detailed assessment of the impacts of the options described in this RIA, the Agency invites the stakeholders to respond to the following questions:

**Questions for AFIS providers:**

- (a) **Would the compliance with the proposed AFIS provisions introduce additional costs and/or burden (e.g. revision of AFIS training courses/material; extra resources in FTEs)?**
- (b) **If the answer to the previous question is affirmative, could you detail the sources of costs and quantify them?**



Questions for all stakeholders:

- (a) Do you believe that the harmonised implementation of AFIS provision will bring safety benefits (e.g. pilot situational awareness)?
- (b) If the answer to the previous question is affirmative, please specify.
- (c) Do you expect an increase in the use of AFIS in the future?
- (d) If the answer to the previous question is affirmative, please specify on which assumptions you base your judgement.

In addition to the above questions, stakeholders are kindly invited to provide any other quantitative information they may find necessary to bring to the attention of the Agency with regard to this RIA.

As a result, the relevant parts of the RIA might be adjusted on a case-by-case basis.

### 3.5. Comparison and conclusion

#### Comparison of options

Table 7 — Final scores of the qualitative impact

	Option 0 No policy change	Option 1 Essential and flexible AFIS rules	Option 2 Comprehensive and prescriptive AFIS rules
Safety	-/0	+	+
Social	0	+	0/+
Economic	0	-/+	-
GA & Proportionality	0	+	-
Better Regulation & Harmonisation	-	++	0/+
<b>TOTAL</b>	<b>-/0</b>	<b>+</b>	<b>0</b>

As a result of the analysis of the impacts as in Section 3.4, Option 1 is preferred over the other two options.

Option 0 could not be selected as the actual regulatory framework requires the establishment of clear and explicit EU regulatory framework on AFIS. In particular, the impact on safety and better regulation and harmonisation resulted negative.

Option 2 could not be selected as its prescriptive nature would imply a significant impact and burden for many stakeholders without fully meeting the principles of 'better regulation'. In addition, said option would not allow the necessary proportionality. On the other hand, it would introduce benefits in terms of harmonisation in AFIS provision.

The proposal with Option 1 establishes clarity on the AFIS provision by setting a comprehensive and explicit set of requirements, which is based on relevant ICAO principles and on the EU legislation



applicable to ATS. Therefore, it meets the safety objectives set in Article 2 of the Basic Regulation, in particular to establish a high uniform level of aviation safety in the EU, and to assist Member States in fulfilling their obligations under the Chicago Convention by providing a basis for a common interpretation and uniform implementation of its provisions. Additionally, the proposal implements the Essential Requirements in Annex Vb Chapter 2.(c) as far as AFIS is concerned.

The harmonisation of AFIS would bring safety benefits for aircraft operators and pilots as it will establish uniform operational principles throughout EU, reducing thus the possibility for misinterpretation of the operational characteristics of the service provided.

The proposal supports the principle of proportionality, as it is established by the balanced set of rules (IRs, AMC, GM), which are flexible to the extent possible within the ATS context to accommodate local needs, and which are built upon feedback received for actual AFIS practices showing a limited impact on existing AFIS provision. By clarifying AFIS fundamental characteristics, and by recognising the possibility for non-ATS units indicated by Member States to facilitate local aviation operations, the proposal establishes clarity and supports the selection of the appropriate service or facilitation for aviation operations at aerodromes, without generating limitations when no ATS (ATC or AFIS) is considered suitable or convenient. All these factors make the proposal proportionate for the affected stakeholders.

The economic impact on competent authorities and AFIS providers could be significant, and for a transitional period, only in presence of an existing non-compliance with the existing and applicable EU regulations and if the flexibility provisions are not well implemented. Aircraft operators could only be economically impacted in case of a raise in the air navigation charges resulting from investments by the AFIS providers to meet the new requirements.

Therefore, Option 1 is the preferred option.

### 3.6. Monitoring and ex post evaluation

Monitoring is a continuous and systematic process of data collection and analysis about the implementation/application of a rule/activity. It generates factual information for future possible evaluations and impact assessments and helps identifying actual implementation problems. With respect to this proposal, the Agency would suggest to monitor:

- The quantitative and harmonised implementation of AFIS throughout EASA Member States, more specifically:
  - if the regulatory proposal had a negative impact on the AFIS provision (decrease or increase of AFIS provision);
  - benchmark the harmonisation in the operational provision of AFIS.
- The amount of safety occurrences at AFIS aerodromes and associated airspaces in order to verify if the regulatory proposal would have introduced an enhancement in the safety of aviation operations.

The monitoring could take the form of collecting and analysing data from different available sources via several tools e.g. standardisation inspections, analysis of the application for flexibility provisions as in Article 14 of the Basic Regulation as well as of alternative means of compliance approved, analysis of



occurrence reports in the AFIS context, queries received by the Agency and the Commission about the interpretation of the AFIS provisions.



## 4. References

### 4.1. Affected regulations

- Commission Implementing Regulation (EU) 2016/1377 of 4 August 2016 laying down common requirements for service providers and the oversight in air traffic management/air navigation services and other air traffic management network functions, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011 and amending Regulation (EU) No 677/2011 (OJ L 226, 19.8.2016, 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 Implementing Regulation (EU) 2016/1185 of 20 July 2016 amending Implementing Regulation (EU) No 923/2012 as regards the update and completion of the common rules of the air and operational provisions regarding services and procedures in air navigation (SERA Part C) and repealing Regulation (EC) No 730/2006 (OJ L 196, 21.7.2016, p. 3)

### 4.2. Affected AMC and GM

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 255/2010 'Acceptable Means of Compliance and Guidance Material to the rules of the air'

### 4.3. Reference documents

- Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1)
- Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (the service provision Regulation) (OJ L 96, 31.3.2004, p. 10)
- Regulation (EC) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organisation and use of the airspace in the single European sky (the airspace Regulation) (OJ L 96, 31.3.2004, p. 20)
- Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC



- of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (OJ L 122, 24.4.2014, p. 18)
- 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 Regulation (EC) No 2150/2005 of 23 December 2005 laying down common rules for the flexible use of airspace (OJ L 342, 24.12.2005, p. 20)
  - Commission Implementing Regulation (EU) No 1206/2011 of 22 November 2011 laying down requirements on aircraft identification for surveillance for the single European sky (OJ L 305, 23.11.2011, p. 23)
  - Commission Regulation (EC) No 2096/2005 of 20 December 2005 laying down common requirements for the provision of air navigation services (OJ L 335, 21.12.2005, p. 13)
  - Commission Implementing Regulation (EU) No 1035/2011 of 17 October 2011 laying down common requirements for the provision of air navigation services and amending Regulations (EC) No 482/2008 and (EU) No 691/2010 (OJ L 271, 18.10.2011, p. 23)
  - 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)
  - ED Decision 2015/014/R of 3 July 2015 'Guidance Material on the implementation of the remote tower concept for single mode of operation'
  - ED Decision 2014/013/R of 27 February 2014 adopting Certification Specifications and Guidance Material for Aerodromes Design 'CS-ADR-DSN — Initial issue'
  - EASA Opinion No 02/2014 'Requirements for apron management services at aerodromes'
  - EASA NPA 2016-02 'Technical requirements and operational procedures for aeronautical information services and aeronautical information management'
  - EASA Safety Information Bulletin (SIB) 2014-07R1: Unexpected Autopilot Behaviour on Instrument Landing System (ILS) Approach
  - ICAO Doc 7300 'Convention of International Civil Aviation'
  - ICAO Annex 2 'Rules of the Air'
  - ICAO Annex 3 'Meteorological Service for International Air Navigation'
  - ICAO Annex 10 'Aeronautical Telecommunications' (Volume II 'Communication Procedures' including those with PANS status)
  - ICAO Annex 10 'Aeronautical Telecommunications' (Volume V 'Aeronautical Radio Frequency Spectrum Utilization')
  - ICAO Annex 11 'Air Traffic Services'
  - ICAO Doc. 4444 'Procedures for Air Navigation Services — Air Traffic Management' (PANS ATM)





- ICAO Doc 8168 'Procedures for Air Navigation Services — Aircraft Operations'(PANS OPS) (Volume II)
- ICAO Doc 9377 'Manual on Coordination between Air Traffic Services, Aeronautical Information Services and Aeronautical Meteorological Services'
- ICAO Doc 9426 'Air Traffic Services Planning Manual'
- ICAO Doc 7030 EUR 'European (EUR) Regional Supplementary Procedures'
- ICAO Doc 9554 'Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations'
- ICAO Doc 9643 'Manual on Simultaneous Operations on Parallel or Near-Parallel Instrument Runways (SOIR)'
- ICAO Doc 9694 'Manual of Air Traffic Services Data Link Applications'
- ICAO Circular 211-AN/128 'Aerodrome Flight Information Service (AFIS)'
- ICAO TEC/OPS/SEP — 08-0294.SLG 'Wake turbulence aspects of Airbus A380-800 aircraft'
- ICAO Working Paper AN-WP/9014 dated 18 February 2016
- ICAO EANPG/54 — WP/15 of 16.11.12
- ICAO EANPG/54 — Flimsy 08 of 04.12.12
- ICAO EANPG/56 — WP 18 of 12.11.14
- ICAO EANPG/56 — Final Report
- ICAO EANPG/57 — Final Report
- EUROCONTROL 'Manual for Aerodrome Flight Information Service (AFIS)' Edition 1.0 of 17.06.2010
- EUROCONTROL 'Guidelines for Contingency Planning of Air Navigation Services (including Service Continuity)' Edition 2.0 of 06.04.2009
- 'Reference Guide to EUROCONTROL Guidelines for Contingency Planning of Air Navigation Services (including Service Continuity)' Edition 2.0 of 06.04.2009
- EUROCONTROL 'Common Format Letter of Agreement Between Air Traffic Services Units' Edition 4.0 of 15.03.2012
- EUROCONTROL 'Guidelines for the Application of European Coordination and Transfer Procedures' Edition 1.0 of 25.10.2012
- Investigation Report C 2/2003 L 'Incident between an airliner and airport maintenance vehicle at Kuusamo airport on 29 January 2003' Issued by the Finnish Investigation Commission — Translation of the original Finnish report
- Investigation Report AX001-1-2/02 published by the German Federal Bureau of Aircraft Accidents Investigation (BFU) in May 2004 regarding the mid-air collision between a Boeing 757-200 and a Tupolev TU154M on 1 July 2002 near Überlingen, Germany
- UK CAP 493 'Manual of Air Traffic Services'
- Study on Aeroplane State Awareness during Go-Around (ASAGA) – Published in August 2013 by Bureau d'Enquêtes et d'Analyses (BEA) pour la Sécurité de l'Aviation civile

