

European Aviation Safety Agency — Rulemaking Directorate Notice of Proposed Amendment 2013-08 (A)

Requirements for ATM/ANS providers and the safety oversight thereof

(Explanatory Note)

RMT.0148 (ATM.001 (a))/ RMT.0149 (ATM.001(B)) AND RMT.0157 (ATM.004(A))/ RMT.0158 (ATM.004(B)) - 10/05/2013

EXECUTIVE SUMMARY

This Notice of Proposed Amendment (NPA) addresses safety, proportionality and regulatory coordination issues related to provision of ATM/ANS by providers and to the safety oversight by competent authorities thereof.

It consists of 5 parts. This is Part A and deals with the Explanatory Note.

The main objectives are to maintain a high level of safety, provide for a smooth transition, and ensure regulatory efficiency in the field of ATM/ANS. The specific objective is to mitigate the risks linked to the increase of air traffic and also the increase of the complexity in the ATM/ANS system.

This NPA proposes an amendment and replacement of the Commission Implementing Regulations (EU) No 1034/2011 and No 1035/2011.

The proposals aim at:

- implementing Regulation (EC) No 216/2008 (hereinafter referred to as the 'Basic Regulation') and at transposing certain ICAO SARPs provisions contained in Annex 3 in relation to the meteorological services providers requirements;
- aligning Safety Management Systems (SMS) requirements in Commission Implementing Regulation (EU) No 1035/2011 with SMS requirements within the ICAO SMS framework and Management Systems requirements in Commission Implementing Regulation (EU) No 1034/2011 with SSP requirements required by ICAO;
- aligning the scope of the requirements for competent authorities with the requirements for ATM/ANS providers;
- introducing management systems requirements and streamlining the requirements for quality management systems for all ATM/ANS providers;
- implementing the essential requirements on human factors for air traffic controllers; and
- introducing training and competence assessment requirements for ATSEPs.

	Applicability	Process map				
Affected	Commission Implementing	Concept Paper:	No			
regulations	Regulation (EU) No 1034/2011 and	Terms of Reference:	30/08/2010			
and decisions:	Commission Implementing Regulation (EU) No 1035/2011	Rulemaking group:	Yes			
Affected	Member States, Competent	RIA type:	Full			
stakeholders:	authorities/ National Supervisory Authorities, ATM/ANS providers,	Technical consultation during NPA drafting:	No			
	Network Manager and the Agency	Duration of NPA consultation:	3 months			
Driver/origin:	Legal obligations (Basic Regulation, EASp and ICAO SARPs)	Review group:	Yes			
Defenses	,	Focussed consultation:	TBD			
Reference:	N/A	Publication date of the Opinion:	2014/Q1			
		Publication date of the Decision:	2015/Q1			

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A. Explanatory Note

I. Introduction

- 1. The backbone of the European aviation safety policy is constituted by a set of common safety rules which are applicable in a uniform manner across the EU. These common safety rules, which apply both to the industry as well as to the civil aviation authorities, constitute the basis of the initial approval and continuing oversight of undertakings engaged in aviation activities in the internal market. Beyond ensuring a high level of safety for the passengers, the aviation safety policy promotes cost efficiency, facilitates the free movement, and assists the Member States to fulfill their ICAO obligations. The growth of aviation in Europe as well as the need to implement the Single European Sky lead to many challenges, in particular regarding the provision of Air Traffic Management and Air Navigation Services (ATM/ANS) and their oversight. Therefore, necessary risk mitigation measures need to be established (and need to be continuously reviewed in order to guarantee their effectiveness) to ensure safety through a harmonised, holistic regulatory approach across the Member States.
- 2. Regulation (EC) No 216/2008¹ (hereinafter referred to as 'the Basic Regulation') as amended by Commission Regulation (EU) No 1108/2009 establishes a comprehensive framework for the definition and implementation of common technical requirements and administrative procedures in the field of civil aviation. The Basic Regulation empowers the Commission to adopt implementing regulations for ATM/ANS including the implementing regulations for certification and oversight by the competent authorities. Furthermore, the Basic Regulation requires that implementing measures are initially developed on the basis of the provisions of Regulations (EC) No 549/2004², (EC) No 550/2004³, (EC) No 551/2004⁴, and 552/2004⁵, and provide for transitional mechanisms to ensure the continuity of certificates already granted under those Regulations. Initially, the implementing regulations shall include the safety related provisions of those Regulations and, where appropriate, in case of future amendments, take into account latest scientific and technical progress.
- 3. The European Aviation Safety Agency (hereinafter referred to as 'the Agency') has accomplished the first requirement for the development of the implementing regulations in the field of ATM/ANS stemming from the Basic Regulation, by publishing Opinion No 02/2010 of the European Aviation Safety Agency of 28 May 2010 for two new Commission Regulations on common requirements for the provision of air navigation services, as regards working methods and operating

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), as amended by Regulation (EC) No 1108/2009 (OJ L 309, 24.11.2009, p. 51).

Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation) (OJ L 96, 31.3.2004, 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 (EC) No 552/2004 of the European Parliament and of the Council of 10 March 2004 on the interoperability of the European Air Traffic Management network (the interoperability Regulation) (OJ L 96, 31.3.2004, p. 26).

procedures and on safety oversight in air traffic management and air navigation services, which resulted in the adoption of:

- Commission Implementing Regulation (EU) No 1034/2011 of 17/10/2011 on safety oversight in air traffic management and air navigation services and amending Commission Regulation (EU) No 691/2010; and
- Commission Implementing Regulation (EU) No 1035/2011 of 17/10/2011 laying down common requirements for the provision of air navigation services and amending Commission Regulations (EC) No 482/2008 and (EU) No 691/2010.
- 4. As explained in Chapter II of that Opinion, the rulemaking process followed by the Agency was not fully in accordance with the relevant Terms of Reference (ToR). Both the process and the content of that Opinion were adapted to the decision of the Single European Sky Committee and as outlined in the subsequent letter of the European Commission addressed to the Agency by further defining the 'fast-track' process for the accelerated transposition of the already existing rules, inter alia:
 - Commission Regulation (EC) No 2096/2005 of 20 December 2005 laying down common requirements for the provision of air navigation services; and
 - Commission Regulation (EC) No 1315/2007 of 8 November 2007 on safety oversight in air traffic management and amending Regulation (EC) No 2096/2005.
- 5. As explained above, the Opinion No 02/2010 covered the transposition of the above mentioned rules with only minimal updates and modifications to take into account the principles of the Basic Regulation and the role of the Agency as a competent authority for certain Air Navigation Service Providers (ANSPs). Due to the limited mandate, the content of that Opinion represented only the first step of a phased approach with an aim to complete the implementation of the requirements stemming from the Basic Regulation and, in particular, to establish full compliance with Articles 8b and 22a and the Essential Requirements in Annex Vb to that Regulation. This issue is further explained in Chapter IV of this NPA.
- 6. This NPA aims at fulfilling certain defined Essential Requirements set out in Annex Vb to the Basic Regulation in relation to the provision of ATM/ANS and its oversight by competent authorities. While building on the previous achievements and existing EU regulatory requirements, this proposed draft Regulation contains the requirements of the following regulations and complements and enhances them:
 - Commission Implementing Regulation (EU) No 1034/2011 of 17/10/2011 on safety oversight in air traffic management and air navigation services and amending Commission Regulation (EU) No 691/2010; and
 - Commission Implementing Regulation (EU) No 1035/2011 of 17/10/2011 laying down common requirements for the provision of air navigation services and amending Commission Regulations (EC) No 482/2008 and (EU) No 691/2010.
- 7. The reason why the Agency proposes to repeal these two regulations is to simplify the reading of the final regulation by avoiding to have an amending regulation which changes the structure and location of the requirements. Furthermore, it will enable the stakeholders to better identify the requirements applicable to them.

II. Scope

8. The scope of the rulemaking activities that resulted in the content of the draft Opinion and Decision of this Notice of Proposed Amendment (NPA) is outlined in the

Terms of Reference (ToR) ATM.001⁶ 'Extension of the EASA system to safety regulation of Air Traffic Management (ATM) and Air Navigation Services (ANS) - development of rules on Requirements for Air Navigation Service Providers' and ATM.004 'Extension of the EASA system to safety regulation of Air Traffic Management (ATM) and Air Navigation Services (ANS) - development of rules on competent authorities' and is described in more detail below.

- 9. Both ToR have been adopted after appropriate stakeholder consultation in October 2009 and amended after the Agency issued the Opinion No 02/2010 ('fast-track') in order to take into account the achievements reached and to better reflect the phased approach.
- 10. The entire scope of the ATM.001 task, as indicated in the ToR, has not been included in this NPA. Indeed, the entire scope of the ATM.001 task covers the technical requirements to implement the Essential Requirements in point 2 of Annex Vb and the requirements for the providers to implement the Essential Requirements in point 5 of Annex Vb. However, the safety requirements and technical specifications for all ATM/ANS services⁷⁸ are not included in this NPA. On the basis of the work by the related rulemaking groups and on the basis of the feedback by stakeholders concerning the visibility of the scope and work under ATM.001, the Agency decided to limit the scope of this NPA under the ATM.001 rulemaking task to cover the following items:
 - General organisational requirements and requirements for management system for the ATM/ANS providers, including the specific organisational requirements for the different providers as stemming from the existing regulations;
 - Specific organisational requirements for MET providers based on ICAO Annex
 3 (and, therefore, replacing the specific requirements in the current regulation);
 - Specific requirements implementing the Essential Requirements in point 5(b) of Annex Vb in relation to the problematic use of psychoactive substances, the management of fatigue and stress of ATCOs, and the requirements for the air traffic control providers to establish and maintain a rostering system;
 - Specific training and competence requirements for the providers employing Air Traffic Safety Electronics Personnel (ATSEPs);
 - Specific technical requirements for the provision of air traffic services which are of rules of the air nature (which has already resulted in the adoption of the Commission Implementing Regulation (EU) No 923/2012 of 26/09/2012 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

The ToR for the rulemaking tasks ATM.001 and ATM.004 are available under: http://easa.europa.eu/rulemaking/terms-of-reference-and-group-composition.php#RMT.

Safety requirements and technical specifications for the services in ATM/ANS means the technical requirements stemming mainly from ICAO Annexes (Annexes 2, 3, 4, 10, 11, and 15) and some ICAO Documents relevant to the provision of ATM/ANS (such as Doc 4444 or PANS-ATM) which are needed for the ATM/ANS providers in order to develop their operating procedures.

As it will be explained later on and as explained in `GM1 ATM/ANS.OR.A.005 Scope DEFINITIONS AND SCOPE IN RELATION TO ATM/ANS', the term ATM/ANS includes all Air Navigation Services (ANS), Air Traffic Services (ATS), Aeronautical Information Services (AIS), Communication, Navigation and Surveillance (CNS) services and meteorological (MET) services, plus Air Traffic Flow Management (ATFM), Airspace Management (ASM), Airspace Design (ASD) plus the services consisting in the origination and processing of data and formatting and delivering data to general air traffic for the purpose of safety-critical air navigation (DAT).

which is known as the Standardised European Rules of the Air (SERA) Implementing Regulation).

- 11. With this NPA, thus, most of the Essential Requirements in points 5(a),(b), and (c) of Annex Vb to the Basic Regulation are implemented. In addition, the Essential Requirements in point 2(a) of Annex Vb to the Basic Regulation are partially implemented with the adoption of the SERA Implementing Regulation.
- 12. In order to implement the remaining Essential Requirements in point 2 of Annex Vb to the Basic Regulation, the Agency has planned the following rulemaking tasks (RMT) which are included in the 4-year Rulemaking Programme 2013-2016 adopted by the ED Decision 2012/013/R of 04 September 2012⁹:
 - RMT.0464 (for the Implementing Rules (IRs)) and RMT.0468 (Acceptable Means of Compliance (AMC) and Guidance Material (GM)) 'Requirements for ATS and SERA (Part C)'¹⁰;
 - RMT.0473 (IR) and RMT.0474 (AMC/GM) 'Technical requirements and operational procedures for MET';
 - RMT.0445 (IR) and RMT.0446 (AMC/GM) 'Technical requirement and operational procedures for Airspace design including procedure design';
 - RMT.0477 (IR) and RMT.0478 (AMC/GM) 'Technical requirement and operation procedures for AIS/AIM';
 - RMT.0479 (IR) and RMT.0480 (AMC/GM) 'Technical requirement and operation procedures for CNS';
 - RMT.0481 (IR) and RMT.0482(AMC/GM) 'Technical requirement and operation procedures for ATFM'; and
 - RMT.0483 (IR) and RMT.0484 (AMC/GM) 'Technical requirement and operation procedures for ASM'.
- 13. In addition to the above tasks, the Agency also launched in June 2012 a rulemaking task to cover specifically the requirements for the ATM/ANS providers and competent authorities in relation to the assessment of changes to the functional systems in ATM/ANS (RMT.0469 (IR) and RMT.0470 (AMC/GM) 'Requirements for Safety assessment of changes to functional systems').
- 14. The reasons why the Agency decided to initiate separate rulemaking tasks for completing the scope of the Basic Regulation as regard ATM/ANS provision are amongst others:
 - the different timescales needed to complete the different tasks;
 - the different expertise needed for the different rulemaking task (covering all different ATM/ANS services);
 - the external and parallel activities that could impact the outcome of the different tasks for the various services (e.g. SESAR deployment, PBN); and
 - the need to facilitate the visibility and transparency of the rulemaking work by the Agency in the field of ATM/ANS for stakeholders.

⁹ 4-year Rulemaking Programme 2013-2016 can be found in the Agency's website in the following link: http://easa.europa.eu/rulemaking/annual-programme-and-planning.php

This RMT will be re-scoped to cover only the technical requirements and operational procedures for ATS because the work package related to the amendment of the SERA Implementing Regulation to include the requirements of what has been named Part C will be managed under the rulemaking task ATM.001 in accordance with the amended European Commission Mandate to EUROCONTROL.

- 15. The way how the Agency plans the implementation of all the obligations contained in the Basic Regulation for the provision of ATM/ANS based on the rulemaking tasks in paragraph 12 will be explained in more details in Chapter IV.
- 16. Furthermore, it is to be noted that due to the structure of the ATM/ANS related implementing regulations, this NPA does not address all the criteria for the development of implementing measures on oversight (under the ToR of the task ATM.004), namely:
 - the provisions for the issuance of ATCO licences, medical certificates and ratings/endorsements, as well as the safety oversight and certification of organisations involved in the training and medical certification of ATCOs; and
 - safety oversight of ANSP responsibilities related to ATM/ANS systems and constituents.
- 17. As recommended by the European Commission, the Agency has so far discontinued the project to establish an horizontal rule structure for organisations and competent authorities. Therefore, the provisions on authority requirements related to licensing and medical certification of air traffic controllers resulted in NPA 2012-18, and especially in Annex II, Part ATCO-AR, as all requirements relevant to ATCO licensing have been included in the related (proposed) Regulation.
- 18. Due to the different timescale of the RMT on ATM/ANS systems and constituents, the Agency decided to address its oversight aspects under RMT.0161 and RMT.0162 'Requirements for systems, constituents and equipment used in ATM/ANS and ADR'. It is anticipated that these rulemaking activities will be launched during 2013.
- 19. This NPA contains the general requirements for all ATM/ANS providers and the obligations for their oversight by the competent authorities. In addition, this NPA provides the general overarching structure and umbrella under which the specific requirements for each ATM/ANS service can be laid down in a clear and logical manner.

III. Process

- 20. The Agency has developed this NPA in line with the Basic Regulation and the Rulemaking Procedure established by the EASA Management Board¹¹.
- 21. This rulemaking activity is included in the Agency's Rulemaking Programme for 2013-2016 Tasks RMT.0148 (IR) and RMT.0149 (AMC/GM) (former ATM.001(a) and (b)) and RMT.0157 (IR) and RMT.0158 (AMC/GM) (former ATM.004(a) and (b)).
- 22. The text of this NPA has been developed by the Agency based on the input of the Rulemaking Groups ATM.001 and ATM.004, the composition of which is available on the Agency's website¹².
- 23. As already explained above and as foreseen in section 5, 'working methods' of the ToR of ATM.001, the rulemaking group (RMG) decided in April 2010 to address certain working packages using ad hoc group of experts. The ad hoc expert groups were established to accomplish a very specific task within the wide scope of the ToR of ATM.001, for a limited period of time and with a limited number of experts on the subject addressed by the group. The ad hoc expert groups developed proposals for Implementing Rules, AMC, and GM, which then were reviewed and further

The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See Management Board Decision concerning the procedure to be applied by the Agency for the issuing of Opinions, Certification Specifications and Guidance Material (Rulemaking Procedure), EASA MB 01-2012, 13.3.2012.

http://easa.europa.eu/rulemaking/terms-of-reference-and-group-composition.php#ATM.

developed by the ATM.001 RMG. ATM.001 RMG was in charge of the integration of the material developed by the different ad hoc groups of experts.

- 24. The following ad hoc groups of experts were established by ATM.001 RMG:
 - Working Group (WG) WG01 SERA & ATS, which was in charge of the work on former SERA Part B and C and the work on the relevant AMCs/GMs. This WG was also initially responsible for the development of the technical requirements and operational procedures for ATS, but, because of the different timescales and as explained in Chapter II, the scope of activity of this WG was limited to SERA, and the rest of activities under its scope has been included into separate rulemaking tasks;
 - WG02 MET, in charge of the transposition of the relevant requirements from ICAO Annex 3 and development of requirements for MET services providers;
 - WG03 TSA, named Total System Approach (TSA) for two reasons. It was the group in charge of integrating the requirements from the other groups and also the group working on the overall concept for the management systems and general organisational requirements for ATM/ANS providers. This group was also in charge of analysis and addressing, where possible, consistency with the requirements applicable in other fields of aviation.
 - WG04 ATSEPs, in charge of developing the requirements for training and assessment of competence of ATSEPs based on the EUROCONTROL Specification for Air Traffic Safety Electronics Personnel (ATSEP) Common Core Content Initial Training.
 - WG05 SATF or Safety Assessment Task Force, tasked to review and propose amendments to the requirements for the assessment of changes to functional systems by AMT/ANS providers, and the review and oversight of the changes to functional systems by competent authorities. As explained in Chapter II of this NPA, the whole of scope of activity has now been included in a separate rulemaking task.
 - WG06 Human Factor (HF), dealing with the implementation of the Essential Requirements in point 5(b) of Annex Vb to the Basic Regulation on the problematic use of psychoactive substances, ATCOs' rostering system, fatigue and stress management system, as well as the review of the study on human factors in ATM/ANS that EUROCONTROL conducted for the Agency, was based on a request made by ATM.001 rulemaking group.
- 25. In some cases the content of the proposals in this NPA may not be fully in line with the recommendations made by the different rulemaking groups. Chapter IV of this NPA aims at explaining such cases, including the reasons that led the Agency to take such a decision.
- 26. ATM.004 rulemaking group supported the Agency with the drafting of the regulatory proposals for competent authorities without establishing any ad hoc group of experts. However, WG05 was also tasked to work on the competent authority requirements in relation to the review and oversight of the assessment of changes to functional systems on behalf of ATM.004 RMG until this work continued as a separated rulemaking task.
- 27. Furthermore, beneficial cooperation has been set up with EUROCONTROL for various subjects of the NPA. This has taken place under the EUROCONTROL-EASA working arrangement and related annual work programmes. EUROCONTROL experts assisted the Agency particularly:
 - in establishing the ATSEPs training requirements and by chairing the WG04 of ATM.001 RMG;

- with the development of the requirements related to human factors for air traffic control services providers and participating in WG06 that was in charge of this subject;
- with the participation, expertise, and provision of some information in support of WG03 and WG05; and
- with the participation in rulemaking groups meetings and continuous coordination.
- 28. EUROCONTROL also supported the Agency by conducting a study on how to implement the Essential Requirements in point 5(b) of Annex Vb to the Basic Regulation for other ATM/ANS personnel than air traffic controllers. The study also addressed the need to further regulate human factors in ATM and whether or not the Basic Regulation contains the appropriated legal basis for it. The result of this study was evaluated by ATM.001 RMG after the initial review accomplished by WG06. The Agency is now implementing the result of the study as part of the rulemaking programme.
- 29. The proposed rules have been developed taking into account the already existing EU legislation under the Single European Sky framework and applicable international standards and recommended practices published by ICAO (i.e. the annexes) on the basis of Article 37 of the Chicago Convention, based on Article 2(2)(d) of the Basic Regulation, which calls upon the Agency 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 when drafting the Implementing Rules.
- 30. According to Article 38 of the Chicago Convention, ICAO contracting States are obliged to notify ICAO of any differences between their national regulations or practices and those prescribed in ICAO Standards the 'filing of differences'. Although the EU is not an ICAO contracting party, it has acquired competence in areas covered by the ICAO Convention, inter alia following the adoption of the Basic Regulation. When the Commission assisted by the Agency adopts new regulations, there is a need for support to identify any differences between the new regulations and the ICAO SARPs so that Member States can then notify ICAO of the differences. One of the mandates of the Basic Regulation (Article 2(2)(d)) is 'to assist Member States in fulfilling their obligations under the Chicago Convention, by providing a basis for a common interpretation...'. For these reasons, it is necessary for the Agency, in coordination with the Commission, Member States, and other bodies, to complete the Electronic Filing Of Differences (EFOD) system. The proposal will be made available to the Commission and the Member States together with the publication of the Agency's Opinion.
- 31. Based on all these inputs, the Agency has prepared the regulatory proposals and the content of this NPA.
- 32. This NPA is open for public consultation for 3 months in line with the Agency's Rulemaking Procedure¹³.
- 33. Following the expiration of the NPA public consultation period, the Agency will consider all comments and will publish a Comment-Response Document (CRD). The CRD will be available on the Agency's website and in the Comment-Response Tool (CRT).
- 34. Following the CRD publication, the Agency will perform a final review and will publish the Opinion in due course.

http://easa.europa.eu/management-board/docs/management-board-meetings/2012/01/EASA%20MB%20Decision%2001-2012%20Revised%20MB%20Decision%20RM%20Process%20.pdf

35. The Decision (containing the relevant AMC and GM) will be issued by the Agency as soon as the related regulation is adopted by the Commission.

IV. Overview of the proposed changes

CHAPTER 1 — GENERAL OVERVIEW OF THE CHANGES

36. The main changes introduced by this NPA to the requirements in the Regulations being repealed (Commission Implementing Regulation (EU) No 1034/2011 and Commission Implementing Regulation (EU) No 1035/2011) are the following:

Changes in the rule structure

37. This NPA proposes the amalgamation of the two Implementing Regulations into one single regulation. The main purpose is to align the scope and applicability of the requirements for the providers and the requirements for competent authorities on their oversight. This would also follow the approach in the other regulated fields of aviation (e.g. initial and continuing airworthiness, air operations, air crew regulations, and aerodromes). This approach has been supported by the European Commission. It would enable easier implementation and would facilitate the work of competent authorities especially when the same authority has oversight responsibilities in different aviation domains. Further description of the structure can be found in Chapter 2 and in Appendix I to this Explanatory Note. A cross reference table between Commission Implementing Regulations (EU) No 1034/2011 and No 1035/2011 and the new proposed regulation can be found in Appendix II to this Explanatory Note.

Changes in the requirements for competent authorities

- 38. To facilitate States (competent authorities) on the implementation of the State Safety Programme (SSP), the Agency is proposing in this NPA the related provisions on ATM/ANS competent authorities in Annex I, Part-ATM/ANS.AR. This Annex proposes the necessary requirements for the administration and management system to be complied with by competent authorities to oversee the ATM/ANS providers. These requirements are fully aligned with the relevant ICAO standards for States' safety oversight systems. It should be emphasised that the safety oversight of personnel involved in safety related ATM/ANS tasks is ensured through the ATM/ANS provider's oversight and not directly addressed to the personnel itself, except the licenced ones. Furthermore, it should be highlighted that the core of the authorities' tasks defined in the draft Implementing Rule does not differ from those regulated by the EU legislation currently in force and what competent authorities are already performing today.
- 39. The main changes to the existing technical requirements and novelties related to the competent authorities are summarised as follows:
 - the introduction of the management system for the competent authority providing full compliance with ICAO obligations on State Safety Programme;
 - the move towards risk-based and performance-based oversight; and
 - the classification of non-compliances and the establishment of a system for categorising the findings by the competent authorities.

Changes in requirements for derogations from the regulations for ANSPs

The earlier provisions allowing Member States issuing derogations on ANSP requirements have been replaced by a possibility for the competent authority to issue a limited certificate. The overall result will be the same because the requirements for the ANSPs to apply for the limited certificate 14 and the eligibility criteria are the same as in the current Regulation. The reason why the Agency introduces this change is of a legal nature. Flexibility provisions allowing Member States to deviate from the Basic Regulation and its IRs are already included in Article 14 of the Basic Regulation. A specific procedure for dealing with these flexibility provisions exists and has already been widely used. The Agency highlighted this issue already in its Opinion No 02/2010. While the earlier derogation mechanism was necessary within the SES framework, such derogation needs could be now avoided by applying clear proportionality in the rules, using different AMC for different types of organisations and by using of the flexibility provisions of the Basic Regulation. Nevertheless, the rulemaking group members did not agree with the initial proposal made by the Agency to totally delete this possibility for derogation and to work on the above mentioned flexibility mechanisms. Therefore, the Agency has decided to maintain a similar system, but adapted to the new regulatory framework and, therefore, the concept of limited certification has been considered the most appropriated to reflect the intent of the existing regulation.

Stakeholders are invited to comment on the possibility to replace the concept of limited certification with proportionate requirements for these providers and with the flexibility provisions included in Article 14 of the Basic Regulation.

Addition of a declaration scheme for flight information services (FIS) providers

41. In order to implement the privileges stemming from Article 8b(3) of the Basic Regulation to provide the Member States the possibility to implement a declaration scheme for flight information services providers, provisions have been introduced to allow the Member States to apply this possibility in a harmonised manner. Eligibility criteria for the declaration of flight information services providers (who could be entitled to declare their activities) and the requirements for declared FIS providers have been proposed based on the criteria and requirements already existing in Commission Implementing Regulation (EU) No 1035/2011 for FIS providers entitled to apply for derogation of some requirements.

Stakeholders are invited to comment on the proposed eligibility criteria for the declaration of FIS providers and, where found not sufficient, propose additional eligibility criteria for FIS providers that could be subject to this declarations scheme including the justifications for the proposals.

Scope of the proposed Implementing Rule

42. The scope of this proposed Implementing Rule shall be the same as in the higher ranking regulation. The Basic Regulation defines the scope of ATM/ANS provision and the related safety objectives to be complied with through the appropriate implementing measures which shall be developed. It also defines the ATM/ANS provision in the definition of 'ATM/ANS' in its Article 3, and the related safety objectives are laid down in the Essential Requirements in Annex Vb to it. This scope

Limited certificate means that the certificate is valid only within airspace under the responsibility of the Member State issuing the limited certificate.

definition is similar to the SES service provision Regulation but with some explicit differences which are to be included in the implementing measures. The Basic Regulation definition of ATM/ANS consists of the SES service provision Regulation definitions¹⁵ for ATM and ANS complemented with the services consisting in the origination and processing of data and formatting and delivering data to general air traffic for the purpose of safety-critical air navigation. Further on, Annex Vb defines detailed safety objectives concerning air traffic flow management, air space management and airspace design. In order to comply with the Basic Regulation, and to cover all the services for which Annex Vb provides Essential Requirements, for clarity as well as for legal certainty, the Agency has used in this Regulation the terms 'ATM/ANS provision' and 'ATM/ANS provider'. It is to be noted that, in the view of the Agency, this is not in any way in conflict with the definition of 'ANSP' in SES service provision Regulation¹⁶ and, in fact, the term 'ANSP' is included (subset) in the term 'ATM/ANS provider'. Moreover, it is generally common that most of ATM/ANS is provided within the Member States by one single provider or very limited number of different providers that interrelate with each other. Therefore, the extension of the regulation has taken this into account and has maintained general common requirements which apply to all ATM/ANS providers as part of one single annex (Annex II, Part-ATM/ANS.OR) and the following annexes (from Annex III to Annex XII) include more specific requirements for the provision of each service. These annexes (from Annex III to Annex XII) will apply only if the provider has been certified to perform the relevant service. This is in line with the current approach for ANS. Indeed, today's common requirements (Commission Implementing Regulation (EU) No 1035/2011) for ANS includes Annex I General requirements for the provision of air navigation services, which is applicable to all ANSPs while:

- Annex II is applicable only to Air Traffic Services Providers (ATSPs) in addition to the requirements in Annex I;
- Annex III is applicable to meteorological services providers (MET providers) in addition to the requirements in Annex I;
- Annex IV is applicable to Aeronautical Information Services providers (AIS providers) in addition to the requirements in Annex I; and
- Annex V is applicable to communication, navigation, surveillance services providers (CNS providers) in addition to the requirements in Annex I.
- 43. The proposed rule also provides consistency between the oversight function of the competent authorities and the requirements for the providers by aligning the applicability and by providing the requirements for ATM/ANS provision against which the competent authority will perform the oversight.
- 44. The Regulatory Impact Assessment (RIA), in subpart D of this NPA, addresses these aspects.

Additional common requirements for ATM/ANS providers

This NPA proposes some new common requirements, such as record keeping, occurrences reporting, and management of changes other than changes to functional systems. They are not considered as additional obligations on the providers but as provisions improving the legal certainty and clarity of the rule. The Agency assumes that existing providers implementing quality systems should have already established and maintained procedures to cover these obligations. The Basic Regulation and, in particular, the Essential Requirements in point 5 of Annex Vb foresee more detailed

¹⁵ Air traffic management functions as defined in Article 2(10) of Regulation (EC) No 549/2004, air navigation services defined in Article 2(4) of that Regulation.

¹⁶ ANSP as defined in Article 2(5) of Regulation (EC) No 549/2004.

requirements and harmonised implementation of these obligations as key elements to enhance and manage safety. Moreover, such requirements need to be implemented also by other aviation organisations, such as the aerodrome operators. The Agency sees a need for further harmonisation of such principles between different aviation operations (while taking, of course, into account the differences between the fields as necessary).

Enhancement of the management system requirements for ATM/ANS providers

Today, in accordance with Commission Implementing Regulation (EU) No 45. 1035/2011 ANSPs other than ATS and CNS providers are required to have (and maintain) a quality management system for the management of the quality of their services. The Basic Regulation requires that ATM/ANS providers establish and maintain a 'risk-based' management system. The Basic Regulation does not specify whether the management system will manage the safety or quality of services, because it considers that the quality performance of the service to be addressed is the one directly or indirectly related to safety. In order to apply this concept and to take into account the different types of ATM/ANS providers and the performance of the services they manage, the Agency has proposed replacing the requirements for quality system with general requirements for management system. The elements of this management system are harmonised for all the different ATM/ANS providers but their application will manage different properties of the different services. This approach also addresses the properties required for the services in point 2 of Annex Vb to the Basic Regulation (e.g. integrity, availability, continuity). The elements of the management system proposed are aligned to the extent possible 17 with the ones required for aerodrome operators as well as with the elements of safety management system required by ICAO in Annex 11 and in Annex 19 (this also to the extent possible since the properties to be managed are different depending on the providers e.g. safety risk management is not applicable to all providers as not all providers have a direct impact on the aircraft operations and, therefore, not all providers can comply with this requirements) and provides a proportionate application of organisational requirements to various ATM/ANS providers. However, it is not the intent of the Agency to require SMS from providers that are not required today to have a SMS. The intent of the Agency is to harmonise the elements of the management systems so as to promote the implementation of an integrated management systems for those providers that would need to implement more than one system (e.g. QMS and SMS).

Enhancement of the Safety Management Systems (SMS) requirements for ATS providers in line with ICAO Annex 11 SMS framework and current developments

46. Taking into account the changes to the management systems and the SMS framework in ICAO Annex 11 and draft ICAO Annex 19, the Agency has proposed reorganising the former requirements for SMS of ATS and CNS providers in a different way to better reflect the ICAO SMS framework. However, when doing so, the Agency has tried to maintain the existing requirements for SMS as far as possible. The intent of the SMS requirements in the existing regulation is in some cases different from the intent of the ICAO SMS framework. Therefore, the proposal within this NPA is to harmonise these objectives and, whenever possible, to

Not all the requirements contained in the management system framework for aerodromes are equivalent to the ones in the management system framework for ATM/ANS providers. This is because of the differences of activities being managed between aerodrome operators and ATM/ANS providers but also within the ATM/ANS providers themselves. For example the requirement to have formal process that ensures that hazards in operations are identified as part of the management system of the aerodrome operator has been replaced with a requirement for all ATM/ANS providers to establish formal interfaces with the relevant stakeholders to ensure that the aviation safety hazards entailed by its activities are identified, evaluated and the associated risks are managed as appropriate. This is because not all ATM/ANS providers are able to identify the aviation safety hazards.

combine the two, to some extent, differing provisions. In some cases, this results in additional requirements for the ATS and CNS providers (e.g. to establish and maintain an emergency response plan). It also results in different concepts than the one that was applied in the past (e.g. concept of safety assurance). Some of the specific requirements applicable for ATS and CNS providers have been replaced by general requirements applicable to ATM/ANS providers (e.g. the specific requirement for management of external services has been replaced by the general requirements for the contracted activities in order to avoid double requirements). The table of comparison between the current management system and safety management system and ICAO SMS framework can be found in Appendix III to this Explanatory Note.

Stakeholders are invited to comment on the proposed approach for implementing ICAO SMS framework.

Specific requirements on ATCO human factors

47. The obligation for air traffic control (ATC) service providers to have in place a rostering system to manage the risk of ATCO fatigue and stress is established in point 5(b) of Annex Vb to the Basic Regulation. Due to various very different ATC environments the Agency has sought for a flexible solution to fulfil this important safety objective. The proposal is included in a new section (section 3) of Annex III applicable only to ATC services providers. The proposal does not contain additional elements to the ones already required in the Basic Regulation at the level of IRs but more detailed elements of the ATCO rostering system are included at AMC level. It is also to be noted that ICAO has planned to work on provision for fatigue risk management system for air traffic controllers. It is important to realise that while the existing regulation contained a general requirement for establishing a rostering system for engineering and technical personnel (point 3.3 of Annex II to Commission Implementing Regulation (EU) No 1035/2011 applicable to ATS providers and also to CNS providers) nothing was required for air traffic controllers which made the Regulation imbalanced from the risk-based point of view.

Specific requirements for meteorological services providers

48. The specific provisions proposed for meteorological services (MET) providers in Annex IV are based on the latest edition available of ICAO Annex 3 as explained below. Since the existing regulation (Commission Implementing Regulation (EU) No 1035/2011) already included a reference for these providers to comply with Annex 3, the requirements as such are not considered to be new but a transposition of them, in a more explicit manner, into the European Regulatory framework which promotes harmonisation and Single European Sky objectives, including facilitating, for example, FAB establishment. A cross reference table between ICAO Annex 3 and the proposed requirements can be found in Appendix V to this Explanatory Note.

Extension of the regulation to cover the Network Manager

49. This proposal follows the intent of the European Commission to include Annex VI General requirements for network functions to Commission Regulation (EU) No 677/2011 of 7 July 2011 laying down detailed rules for the implementation of Air Traffic Management (ATM) network functions and amending Commission Regulation (EU) No 691/2010 into the common requirements for ANS. With the extension of the common requirements to the provision of ATM/ANS (and, therefore, including ATFM and ASM), the European Commission has requested the Agency to transfer Annex VI to Commission Regulation (EU) No 677/2011 under the same umbrella so as to align the requirements between all ATM/ANS providers and to apply the same principles. The proposal also supports the implementation of the Basic Regulation,

in particular Article 8b(2), which requires the providers of ATFM and ASM to be certified. Therefore, the Network Manager, being an ATM/ANS provider, would be subject to certification and continuous oversight. Network Manager being a pan-European service provider would mean that the Agency shall be the competent authority for its certification and oversight. A cross reference table between Annex VI to Commission Regulation (EU) No 677/2011 and the provisions proposed in this NPA can be found in Appendix II to this Explanatory Note.

Requirements for ATM/ANS providers on training and competence assessment of ATSEPs

Point 3.3 of Annex II to Commission Implementing Regulation (EU) No 1035/2011 already required the ATS and CNS providers to establish and maintain training plans and to ensure the adequacy of competence of personnel. In addition, Article 9 of the same regulation required the respective competent authority of Member States to establish appropriate safety rules for engineering and technical personnel who undertake operational safety-related tasks and to ensure adequate and appropriate safety oversight of the engineering and technical personnel. The European Commission has also requested the Agency to prepare the necessary regulatory measures based on the ATSEPs Common Core Content (CCC) specifications for initial training developed by EUROCONTROL. The proposed requirements on basic training and system/equipment rating and competence assessment for ATSEPs represent the best compromise prepared by the dedicated expert group. It transposes EUROCONTROL Specifications on ATSEPs CCC into the necessary IRs, AMC, and GM taking into account the best practices among the European Member States and industry as well as the need for proportionality and flexibility.

CHAPTER 2 — CHANGES ON THE RULE STRUCTURE FROM COMMON REQUIREMENTS AND SAFETY OVERSIGHT REGULATIONS TO ONE SINGLE REGULATION

51. As already explained in paragraph 37, one of the main novelties of this proposal is the rule structure. The change in rule structure does not only aim at reorganising the requirements in a better and fully aligned manner but also at paving the way for future amendments of the Regulation taking into account the foreseen rulemaking tasks directly stemming from the Basic Regulation.

Rule structure

- 52. The new proposed rule structure merges the two Commission Implementing Regulations into one single regulation following the advice by the European Commission in 2010 to align the rule structures of the safety related aviation regulations. The proposed rule structure is explained below and is further detailed in Appendix I to this Explanatory Note:
 - Cover Regulation: consisting of 11 articles, mainly on scope of the Regulation and of the different Annexes, the obligations for Member States when implementing the Regulation, provision on transition provisions, repeals, and entry into force;
 - Annex I, REQUIREMENTS FOR COMPETENT AUTHORITIES IN ATM/ANS (Part-ATM/ANS.AR) contains the administration and management system requirements to be complied with by competent authorities responsible for the certification, oversight, and the enforcement of the regulated ATM/ANS providers. It is based on the requirements of Commission Implementing Regulation (EU) No 1034/2011 and complemented with some detailed requirements necessary for the certification and enforcement of the providers and the management of the competent authorities. The Annex is subdivided into 3 subparts:

- a. SUBPART A, General requirements (ATM/ANS.AR.A);
- b. SUBPART B, Management (ATM/ANS.AR.B); and
- c. SUBPART C, Oversight, certification and enforcement (ATM/ANS.AR.C).
- Annex II, COMMON REQUIREMENTS FOR THE PROVISION OF ATM/ANS (Part-ATM/ANS.OR) which contains the requirements applicable to all ATM/ANS providers for the provision of ATM/ANS. It follows the requirements from Annex I to Commission Implementing Regulation (EU) No 1035/2011 and complements them with organisational requirements necessary to implement point 5(a) of Annex Vb to the Basic Regulation. It is subdivided into 3 subparts:
 - a. SUBPART A, General Common Requirements (ATM/ANS.OR.A);
 - b. SUBPART B, Management (ATM/ANS.OR.B); and
 - c. SUBPART C, Specific organisational requirements for ANS and ATFM providers (ATM/ANS.OR.C).
- Annex III, SPECIFIC REQUIREMENTS FOR THE PROVISION OF AIR TRAFFIC SERVICES (Part-ATS) which contains the specific requirements to be complied with by ATS providers in addition to the requirements in Annex II. The requirements in this Annex have been taken from Annex II to Commission Implementing Regulation (EU) No 1035/2011 and are amended to take into account the ICAO SMS framework and the implementation of the Essential Requirements in point 5(b) of Annex Vb to the Basic Regulation. The references to ICAO Annexes have also been amended to refer to SERA Implementing Regulation and to take into account the latest amendments to the ICAO Annexes. It is subdivided into the following subparts and sections:
 - a. SUBPART A, Additional organisation requirements for the provision of air traffic services (ATS.OR)
 - 1. Section 1 General requirements
 - 2. Section 2 Safety of services
 - 3. Section 3 Human factors principles for the provision of Air Traffic Control service
 - b. SUBPART B, Technical requirements for the provision of air traffic services (ATS.TR)

Section 1 — General requirements

- Annex IV, SPECIFIC REQUIREMENTS FOR THE PROVISION OF METEOROLOGICAL SERVICES (Part-MET) which contains the specific requirements to be complied with by MET providers in addition to the ones contained in Annex II to provide meteorological services. It combines the requirements existing in Annex III to Commission Implementing Regulation (EU) No 1035/2011 and transposes the provisions of ICAO Annex 3 from an organisational perspective. It is subdivided in the following subparts and sections and chapters:
 - a. SUBPART A, Additional organisation requirements for the provision of meteorological services (MET.OR)
 - 1. Section 1 General requirements
 - 2. Section 2 Specific requirements
 - Chapter 1 Requirements for meteorological watch offices
 - Chapter 2 Requirements for aerodrome meteorological offices

- Chapter 3 Requirements for meteorological stations
- Chapter 4 Requirements for Volcanic Ash Advisory Centre (VAAC)
- Chapter 5 Requirements for World Area Forecast Centre (WAFC)
- Chapter 6 Requirements for Tropical Cyclone Advisory Centre (TCAC)
- b. SUBPART B, Technical requirements for the provision of meteorological services (MET.TR)
 - Section 1 General requirements
- Annex V, SPECIFIC REQUIREMENTS FOR THE PROVISION OF AERONAUTICAL INFORMATION SERVICES (Part-AIS) which contains the specific requirements to be complied with by AIS providers in addition to the ones contained in Annex II to provide aeronautical information services. This Annex includes the requirements of Annex IV to Commission Implementing Regulation (EU) No 1035/2011. The change is only the addition of a paragraph on the scope and the references to the new version of ICAO Annexes. It is divided in the following subparts and sections:
 - a. SUBPART A, Additional organisation requirements for the provision of provision of aeronautical information services (AIS.OR)

Section 1 — General requirements

b. SUBPART B, Technical requirements for the provision of aeronautical services (AIS.TR)

Section 1 — General requirements

- Annex VI, SPECIFIC REQUIREMENTS FOR THE PROVISION OF DATA FOR AIRSPACE USERS FOR THE PURPOSE OF AIR NAVIGATION (Part-DAT) which should contain the specific requirements to be complied with by DAT providers in addition to the ones contained in Annex II to provide services consisting in the origination and processing of data and formatting and delivering data to general air traffic for the purpose of safety-critical air navigation. At the moment, the content of this Annex is 'reserved' waiting for the outcome of a separate rulemaking task as explained below.
- Annex VII, SPECIFIC REQUIREMENTS FOR THE PROVISION OF COMMUNICATION, NAVIGATION AND SURVEILLANCE SERVICES (Part-CNS) contains the specific requirements to be complied with by CNS providers in addition to the ones contained in Annex II to provide communication, surveillance and navigation services. It includes the requirements in Annex V to Commission Implementing Regulation (EU) No 1035/2011 with the only addition of a scope paragraph. The references to ICAO Annexes have been revised to the new ones. It is divided in the following subparts and sections:
 - a. SUBPART A, Additional organisation requirements for the provision of provision of communication, navigation and surveillance services (CNS.OR)

Section 1 — General requirements

b. SUBPART B, Technical requirements for the provision of provision of communication, navigation and surveillance services (CNS.TR)

Section 1 — General requirements

 Annex VIII, SPECIFIC REQUIREMENTS FOR THE PROVISION OF AIR TRAFFIC FLOW MANAGEMENT (Part-ATFM) contains the specific requirements to be complied with by ATFM providers in addition to the ones contained in Annex II to provide air traffic flow management. This Annex contains only a scope paragraph and a reference to Commission Regulation (EU) No $255/2010^{18}$ and Commission Regulation (EU) No $677/2011^{19}$. The content of this Annex will be amended based on the outcome of separate rulemaking tasks. The temporary structure of this Annex is as follows:

SUBPART A, TECHNICAL REQUIREMENTS FOR THE PROVISION OF AIR TRAFFIC FLOW MANAGEMENT (ATFM.TR)

Section 1 — General requirements

- Annex IX, SPECIFIC REQUIREMENTS FOR THE PROVISION OF AIRSPACE MANAGEMENT (Part-ASM) should contain the specific requirements to be complied with by ASM providers in addition to the ones contained in Annex II to provide airspace management. At the moment, the content of this Annex is 'reserved' waiting for the outcome of a separate rulemaking task as explained below.
- Annex X, SPECIFIC REQUIREMENTS FOR THE PROVISION OF AIRSPACE DESIGN (Part-ASD) should contain the specific requirements to be complied with by ASD providers in addition to the ones contained in Annex II to provide airspace design services. At the moment, the content of this Annex is 'reserved' waiting for the outcome of a separate rulemaking task as explained below.
- Annex XI, SPECIFIC REQUIREMENTS FOR THE NETWORK MANAGER (Part-NM) contains the specific requirements to be complied with by the Network Manager in addition to the ones contained in Annex II to provide air traffic flow management and other network management functions. This Annex contains only a scope paragraph and a reference to other Union legislation and in particular to_Commission Regulation (EU) No 677/2011 and Commission Regulation (EU) 255/2010. The content of this Annex may be amended in the case the European Commission amends the above mentioned regulations. The temporary structure of this Annex is the following:

SUBPART A, TECHNICAL REQUIREMENTS FOR THE NETWORK MANAGER (NM.TR)

Section 1 — General requirements

Annex XII, SPECIFIC REQUIREMENTS FOR ATM/ANS PROVIDERS REGARDING PERSONNEL TRAINING AND COMPETENCE ASSESSMENT REQUIREMENTS contains the requirements for ATM/ANS providers in addition to those contained in Annex II for the personnel training and competence assessment. At the moment, this Annex contains only one section related to ATSEPs but the intent of the Agency is to assess if there is a need to complement the Annex with other specific requirements for the training of other personnel (e.g. meteorological officers or engineers, flight information services officers). The present structure is as follows:

SUBPART A, Technical and engineering personnel

Section 1 — Air Traffic Safety Electronics Personnel

Chapter 1 — General

Chapter 2 — Training requirements

¹⁸ Commission Regulation (EU) No 255/2010 of 25 March 2010 laying down common rules on air traffic flow management (OJ L 80, 26.3.2010, p. 10).

¹⁹ Commission Regulation (EU) No 677/2011 of 7 July 2011 laying down detailed rules for the implementation of air traffic management (ATM) network functions and amending Regulation (EU) No 691/2010 (OJ L 185, 15.7.2011, p. 1).

Chapter 3 — Competence assessment requirements

Chapter 4 — Instructors and assessors

Regarding the presentation of the text in this NPA, the Agency has preferred to present the new proposed text in clean version. Presenting the proposal in the form of an amending regulation (strikethrough the deleted text and grey highlighted the new proposed text) would have made the proposal very difficult to read because of the reorganisation of the text and the change of the structure. However, the cross reference table in Appendix II to this Explanatory Note should provide the reference between the requirements in Commission Implementing Regulations (EU) No 1034/2011 and No 1035/2011 and the new proposed requirements.

Future evolution of the rule

- 53. As already explained in paragraph 14, the Agency has decided to complete the work of implementing the Basic Regulation through separate rulemaking tasks. The rulemaking tasks referred to in paragraph 12 complete mainly the technical requirements related to the provision of ATM/ANS and amend mainly the technical requirements of Annexes III to Annex X to the proposed regulation. In addition, and as result of these rulemaking tasks, there may be also additional specific requirements which are more of an organisational nature which could be included in Subpart A of the relevant Annex or as specific AMC applicable to that particular service. The evolution is also contained in the graphic representation in Appendix I to this Explanatory Note. Moreover, the work on the specific services may also result on specific requirements for the personnel related to that service and, therefore, Annex XII may be amended in consequence.
- 54. However, there are rulemaking tasks, namely RMT.0469 and RMT.0470 on safety assessment of changes to functional systems in ATM/ANS which will complement Annex I, Annex II, and Annex III and may amend Annex IV to Annex XI. As already explained above, the objective of this rulemaking task is to review and enhance the existing regulations on safety assessment of changes to ATM functional systems²⁰ and their review by competent authorities. Some placeholders for the future requirements have already been included within the proposed regulatory text.

The outcome of this task will most likely be integrated in Annex I, Annex II, and Annex III. While the publication of the two proposals for public consultation will be done through two different NPAs, the issuance of the final Opinion by the Agency to the European Commission may contain both proposals already integrated.

In addition, the European Commission is working on a proposal for amending Single European Sky and EASA Basic Regulations (Single European Sky (SES) 2+) which could affect the content of the proposed draft requirements in this NPA. As such proposal has not been made available prior to the publication of this NPA, the Agency will address the effect of the Commission proposal in the proposed Regulation together with the review of the comments received during the public consultation and will be reflected in the CRD and subsequent Agency's Opinion and Decision.

Moreover, the Agency is working on the RMT.0518 'Development of AMC/GM for safety key performance indicators (ATM performance IR) for reference period 2' which supports the implementation of Commission Regulation (EU) No 691/2010 and its amendments regarding the safety key performance indicators. The work has just started and no proposal was available prior to this NPA publication. The Agency will assess the impact of this work on the content of the proposals in this NPA and

²⁰ 'Functional system' is defined today as a combination of systems, procedures, and human resources organised to perform a function within the context of ATM.

vice versa, and the outcome of this co-ordination will also be reflected in the CRD and subsequent Agency's Opinion and Decision.

CHAPTER 3 — COVER REGULATION — Main changes and explanation

- 55. The recitals of the new proposed regulation have not been published with this NPA because their content will depend upon the final content of the regulation as they usually contain considerations, clarifications, and references for future work. Anyway, most of them will originate from the current regulations but some of them may need to be modified or replaced in order to reflect properly the contents of the proposed rule.
- 56. The main changes in the Cover Regulation originate from the amalgamation between the two regulations and, therefore, some of the articles, such as **Article 1** 'Subject matter and scope' and Article 2 'Definitions' have been aligned and combined into one article.
- Article 2 contains definitions coming from both Articles 2 of Commission Implementing Regulation (EU) No 1034/2011 and Commission Implementing Regulation (EU) No 1035/2011. In addition, some new definitions became necessary because of the introduction of the new requirements. The definition of 'operating organisation' has been deleted because the concept has been replaced by the concept of 'contracted activities' in ATM/ANS.OR.B.020 since the old term has only been used in the context of safety requirements for engineering and technical personnel undertaking operational safety related tasks. The concept of contracted activities is wider and applies also to the engineering and technical personnel undertaking operational safety related tasks working within the contracted organisation. The definition of 'air navigation service provider' in Commission Implementing Regulation (EU) No 1035/2011 has now been deleted because it is not the same as the definition in Regulation (EC) No 549/2004 (the framework Regulation) since the definition in the framework Regulation is clearer and the interpretation that an entity having applied for an ANSP certificate could be considered already as a certified ANSP is avoided.
- 58. Some of the new proposed definitions come from ICAO Annex 3 and are terms used within Annex IV of the new proposed regulation. These definitions are needed for the technical requirements of different ATM/ANS services stemming from a transposition of the relevant provisions in ICAO Annexes.
- The term 'ATM/ANS provider' reflects the definition of 59. ATM/ANS in the Basic Regulation and the list of related services in point 2 of Annex Vb to the same Regulation. This definition now covers all ATM/ANS services as defined in the Basic Regulation. Indeed, the term 'ATM/ANS provider' includes providers of aeronautical information services (AIS), services consisting in the origination and processing of data and formatting and delivering data to general air traffic for the purpose of safety-critical air navigation (DAT), Air Traffic Services (ATS=Air Traffic Control (ATC)+Flight Information Services (FIS)+Alerting services (ALS)+Air traffic advisory services), Communication, Navigation and Surveillance services (CNS), Meteorological services (MET), Air Traffic Flow management (ATFM), Airspace Management (ASM), Airspace Design Services (ASD), and ATM network functions (which are functions performed by the Network Manager established under Article 3 in accordance with Commission Regulation (EU) No 677/2011). ATM includes Air Traffic Services (ATS), Air Traffic Flow Management (ATFM) and Airspace Management (ASM). ANS includes Aeronautical Information Services (AIS), Air Traffic Services (ATS=ATC+FIS+ALS), Communication, Navigation and Surveillance services (CNS) and Meteorological services (MET). The framework Regulation contains definitions for ATS, AIS, MET, CNS, ATFM, and ASM but it does not contain definitions for DAT neither for ASD. However, the term DAT has been described and scoped in the Basic Regulation while a description of the

term 'airspace design' (ASD) has been included in GM1 ATM/ANS.OR.A.005 'Scope': 'Airspace design service is a service for the design, survey, and validation of airspace structures and flight procedures before being deployed and used by aircraft.' This GM explains all this into detail and the following figure represents the concept in a graphical manner:

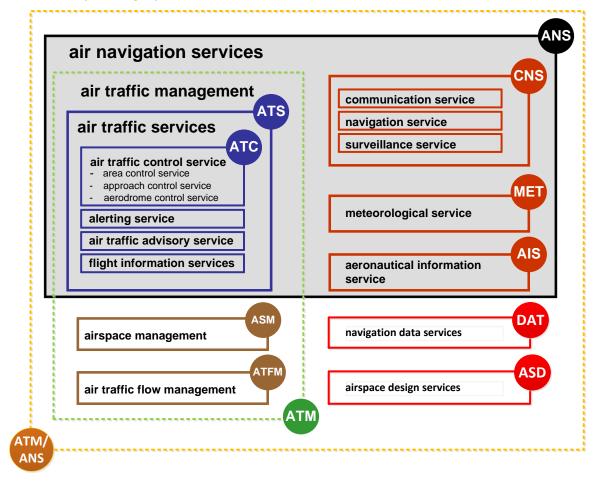


Figure 1: The scope of ATM/ANS services as specified in Annex Vb to Regulation (EC) No 216/2008 and in the definition of ATM/ANS in Article 3 of the same Regulation.

- 60. A specific detail related to the proposed definitions is the use and abuse (or problematic use) of psychoactive substances by ATM/ANS personnel, and, in particular, by air traffic controllers, which was recurrent also in the development of the draft implementing measures under the rulemaking tasks on the licensing and medical certification of air traffic controllers.
- 61. ICAO Annex 1²¹ defines psychoactive substances as follows:
 - 'Psychoactive substances shall mean alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.'
- 62. This definition has been adopted so far in all EASA Opinions and Decisions dealing with this subject and is subsequently included in the resulting EU aviation safety-related regulations; amongst these, it is worth to mention the recently adopted

See Chapter 1.1 'Definitions' of ICAO Annex 1 - Personnel Licensing.

- Commission Implementing Regulation (EU) No 923/2012 on Standardised European Rules of the Air^{22} .
- 63. Caffeine is a psychostimulant which is contained in coffee as well as in other drinks and beverages, like, for instance, tea, largely consumed by people and available on the market and the use of which is not subject to any prescription or limitation. The Agency and various experts of the ATM.001 and ATM.003 rulemaking groups are of the opinion that if in the context of this NPA the said definition remains unchanged, individuals taking caffeine via these drinks would be considered as being under the effect of psychoactive substances and, therefore, subject to related provisions.
- 64. Therefore, in order to mitigate this issue, the Agency proposes with this NPA to modify the aforementioned ICAO definition to exclude not only coffee, but caffeine from the list of psychoactive substances, as follows:
 - 'Psychoactive substances shall mean alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, psychostimulants, hallucinogens, and volatile solvents, whereas caffeine and tobacco are excluded.'
- 65. Should this proposal be accepted following the public consultation of this NPA, and, therefore, be included in the resulting Agency's Opinion to be submitted to the European Commission, this would require the said Opinion to amend and align the definition of psychoactive substances included in Commission Implementing Regulation (EU) No 923/2012 on Standardised European Rules of the Air accordingly. Additionally, Member States would be required to file a difference between ICAO Annex 2 and the amended Regulation on Standardised European Rules of the Air, the latter being less prescriptive.

Stakeholders are invited to comment on the Agency's proposal to amend the definition of psychoactive substances to exclude caffeine from psychostimulants.

- 66. The definitions of safety assurance, safety objective, and safety requirement have not been included in this proposal because they are used in the requirements related to safety assessment of changes to functional systems and the requirements in the current regulation are being reviewed separately under rulemaking tasks RMT.0469 and RMT.0470.
- 67. **Article 3** 'Competent authority' has been modified to take into account the amalgamation of the two regulations and the specific requirements for the competent authorities. This article considers the competent authority responsible for certification and oversight as in the current regulations, but it also adds the concept of competent authority established or nominated by the Member State as the authority responsible for the operation in a given airspace. This is essential for establishing conditions or specifications for the provision of meteorological services. While this concept is only used in the proposal for the provision of meteorological services, it may be used for introducing the technical requirements for other ATM/ANS services too. In addition, this article also stipulates the required action in cases where more than one competent authority would be established or nominated by the State. In such cases, the area of competence of the competent authorities concerned shall be clearly defined in terms of responsibilities and geographical and airspace limitation and by coordination based on written arrangements established between them a proper oversight of the regulated organisations would be ensured.

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).

Additionally, paragraph 5 guarantees their independence from the ATM/ANS providers. Besides that, based on the concept laid down in Article 4 of Commission Implementing Regulation (EU) No 1034/2011 in cases of Functional Airspace Blocks (FAB) or in cross border service provision in which the Agency is the competent authority for at least one of the organisations, a new paragraph 4 has been introduced. This provision requires coordination by the Member States concerned with the Agency in order to ensure that the responsibilities for the safety oversight are properly identified and allocated.

68. **Article 4** 'ATM/ANS providers' specifies which annex needs to be complied with by each provider. The table below explains the intent of this article. This table is also included in GM1 ATM/ANS.OR.A.005 'Scope'.

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	(P	Annex II art-ATM/AN	NS)	Annex III (Part- ATS)	Annex IV (Part- MET)	Annex V (Part- AIS)	Annex VI (Part- DAT)	Annex VII (Part- CNS)	Annex VIII (Part- ATFM)	Annex IX (Part- ASM)	Annex X (Part- ASD)	Annex XI (Part- NM)	Annex XII PER
	Subpart A	Subpart B	Subpart C										
Air traffic services ²³	х	х	х	х									
Meteorological services	x	x	x		x								
Aeronautical information services	x	х	x			x							
Data providers	Х	х					х						
Communication, navigation and surveillance service	x	х	x					x					
Air traffic flow management service	х	x	x						x				
Airspace management service	x	x								x			
Airspace design	Х	х									х		

²³ Section 3 of Annex III (Part-ATS) only applies to providers of air traffic control services and not to providers of alerting, air traffic advisory, and flight information services.

service									
Network manager	x	x	x					x	
ATM/ANS providers ²⁴									х

The applicability of Annex XII is dependent upon the scope as specified within each of the subparts of Annex XII. For example, Annex XII, Subpart A, Section 1 (ATSEP), only relates to air traffic management and to communication, navigation and surveillance systems as used by ATM/ANS providers. However, the intention of the Agency is to include training and competence assessment requirements for other type of personnel in the future.

- 69. Taking into account the introduction of the management system of the competent authorities, **Article 5** transposes the requirements on the 'Oversight capabilities' of the competent authorities. This provision originates from Article 12 of Commission Implementing Regulation (EU) No 1034/2011 and the relevant requirements of Article 7 of Commission Implementing Regulation (EU) No 1035/2011. It is also fully consistent with the critical elements of a safety oversight system as defined by ICAO²⁵ and obliges the Member States to ensure their personnel is empowered to carry out certification and oversight tasks in accordance with the applicable legal provisions.
- 70. **Article 6** 'Declaration by flight information service providers' implements Article 8b.3 of the Basic Regulation and specifies the conditions and eligibility criteria of FIS providers to be considered by the Member States when making use of this possibility. The list is open and not exhaustive and, therefore, the Member States may use also other conditions. A question has been made to the stakeholders on this subject in paragraph 41.
- 71. Article 7 'Means of compliance' introduces the scheme to deal with the means of compliance alternative to the AMC issued by the Agency. The AMC established by the Agency in accordance with Articles 18 and 19 of the Basic Regulation serve as a means by which the requirements contained in the rule can be met, hereby offering the benefit of presumption of compliance. However, flexibility is provided and applicants may decide to show compliance with the requirements using other means and may propose an alternative means of compliance to their competent authority based, or not, on those issued by the Agency. The proposed procedure is necessary because this NPA contains some AMC that the Agency proposes. These alternative means of compliance must only be used when affected parties are able to demonstrate that the safety objective set out in the IRs is met. The competent authority must notify the Agency when it has approved or uses such alternative means of compliance. The proposed procedure is the same with the one already adopted for the field of aircrew²⁶ and air operations²⁷ and is now being proposed for the field of aerodromes (EASA Opinion No 01/2013) and air traffic controller licensing (NPA 2012-18).
- 72. **Article 8** 'Flexibility provision' sets up the procedure for making use of the flexibility provisions established in Articles 14(1), 14(4), and 14(6) of the Basic Regulation and regulates the information to be provided in the notification sent by a Member State. The proposal provides appropriate implementation flexibility without compromising a uniform application of the relevant provisions, as well as enhancing efficiency in the process of granting exemptions and derogations.
- 73. **Article 9** 'Transitional provisions' has not been completed in this proposal. Adequate transitional provisions can only be proposed after the consultation on the relevant proposals, and the evaluation of the comment and finalisation of the proposed rule text. It will be proposed in the Agency Opinion to the European Commission and will be discussed together with the rule text during comitology procedure. However, in order to obtain stakeholders views on the subject, the

http://legacy.icao.int/fsix/criticalelements.pdf

Commission Regulation (EU) No 290/2012 of 30/03/2012 amending Regulation (EU) No 1178/2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 100, 5.4.2012, p.1).

²⁷ Commission Regulation (EU) No 965/2012 of 05/10/2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p.1).

Agency, based on the proposed text of the present NPA, would like to propose the following transition provisions:

- The Agency is proposing 18 months adaptation time to allow the competent authorities to ensure compliance with and adapt themselves to the new requirements.
- For ANSPs that have already been certified in accordance with Commission Implementing Regulation (EU) No 1035/2011, two years of transition from the date of entry into force of the new proposed regulation (which may happen the earliest in 2015 taking into account normal rulemaking processes) could be proposed to allow for the adaption of some processes and procedures, to fulfil some more detailed obligations and to consider the proposed AMC and GM as well as to provide the relevant personnel the necessary training. This means that the expected applicability or implementation date would not be earlier than 2017.
- Two years transition period is also proposed for the implementation of the more detailed provisions for meteorological services providers, the new provision on ATCO rostering system, fatigue and stress management, and also for the implementation of the proposed requirements for ATSEPs. The reason is that these requirements are very general. In addition, in the case of the new proposed requirements for training and competence assessment for ATSEPs, there is enough flexibility already built in the requirements which allows them to be proportionally applied.
- For ATM/ANS providers which were not in the scope of Commission Implementing Regulation (EU) No 1035/2011, such as ATFM, ASM, DAT and ASD providers, the Agency proposes two years transition with a maximum opt out by the Member States for one additional year (resulting in total in three years transition) for implementing the requirements. This transition period also applies when the provider has already a certificate in accordance with Commission Implementing Regulation (EU) No 1035/2011 but needs to extend the certificate to cover the provision of ATFM, ASM, DAT or ASD. Two years is the proposed transition period for the certification of the Network Manager by the Agency acting as competent authority.

Stakeholders are invited to comment on the Agency's proposal for transitional provisions.

74. **Article 10** 'Repeal' states that Commission Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011 are repealed and replaced by the proposed one. In addition, and taking into account the proposals concerning the Network Manager, it is also proposed to repeal Annex VI of Commission Regulation (EU) No 677/2011 to avoid double regulation. This Annex is a replica of Annex I of Commission Implementing Regulation (EU) No 1035/2011. Annex I to Commission Implementing Regulation (EU) No 1035/2011 is being replaced by the proposed Annex II to the draft regulation in this NPA.

CHAPTER 4 — Annex I — Requirements for competent authorities

75. This chapter provides more detailed explanations on the proposed provisions concerning the competent authorities. These provisions aim at clarifying the new elements and the differences compared to the content of the current Commission Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011. The Agency has also prepared cross reference tables to facilitate the comparison between the proposed requirements and the above-mentioned regulations, as well as the elements of the State Safety Programme (SSP) as required by ICAO. These tables can be found in Appendix II and III to this NPA. Regarding the implementation, the

Agency considers that the date of applicability set for 18 months after the publication of this new Regulation will ensure smooth transition for the competent authorities and will facilitate amending their national systems in order to comply with the new rules proposed.

- 76. The Part on requirements for competent authorities (**Part-ATM/ANS.AR**) consists of three Subparts which are detailed below. As briefly indicated in Chapter 1, the requirements are now grouped in alignment with the existing authority requirements relevant to other aviation domains, e.g. aircrew and air operations and is now being proposed for the field of aerodromes (EASA Opinion No 01/2013) and air traffic controller licensing (NPA 2012-18). They offer a balanced combination of already existing requirements in the Commission Implementing Regulation (EU) No 1034/2011, and some new or revised requirements purposed to meet the specific safety objectives of the Basic Regulation. Furthermore, the Agency delivers, where possible, the accompanying 'soft law' in the form of AMC and GM in order to assist the Competent Authorities/National Supervisory Authorities (CAs)/(NSAs) in the implementation of the IRs in accordance with the new requirements. AMC are non-binding means by which the requirements contained in the IRs can be met, hereby offering the benefit of presumption of compliance.
- 77. Subpart A outlines the scope (**ATM/AMS.AR.A.001**) for the competent authorities. These requirements have been mainly transferred from Commission Implementing Regulation (EU) No 1034/2011, such as the provision on safety directives, while some originate from the Basic Regulation or other EU legislation obligations, such as the provision on information to the Agency and contribution to the Member States' annual reports by the competent authorities.
- 78. **ATM/ANS.AR.A.005** transposes the requirements on the oversight functions with some minor adaptations tailored being applied by the competent authorities.
- The provision contained in ATM/ANS.AR.A.010 on 'Information to the Agency' requires competent authorities to notify any significant problems with the implementation of the Basic Regulation and this Implementing Regulation and also to provide certain safety-significant information to the Agency. This provision is based on the already existing requirements to the competent authorities in the aircrew and air operations and is now being proposed for the field of aerodromes (EASA Opinion No 01/2013) and air traffic controller licensing (NPA 2012-18). In order to enhance the reporting practice between the competent authorities and the Agency, this provision introduces the reporting obligation of safety significant occurrences. However it should be highlighted that although Directive 2003/42/EC²⁸ established the concept of mandatory safety reports in case of serious incidents, the Agency is of the opinion that the related implementing measures do not provide for explicit requirements on the need to report to the Agency all available safety information. The Agency should be informed of issues relating to aviation safety as identified in the European Aviation Safety Programme (EASP) or areas specifically identified by the Agency as constituting a safety concern.

Stakeholders are invited to comment whether more details on the reporting obligation of safety significant information would need to be developed and further specified in AMC and GM.

80. In order to implement the Basic Regulation, especially its Article 8b(7)(e), the criteria for the reaction to safety problems are proposed in **ATM/ANS.AR.A.015** Immediate reaction to safety problem. The ATM.004 rulemaking group saw that the necessary measures are already implemented by the safety directive provision as

Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation (OJ L 167, 4.7.2003).

laid down in Article 13 of Commission Implementing Regulation (EU) No 1034/2011. However, the Agency considers that the requirement to allow for immediate reaction to established causes of accidents and serious incidents is indeed different and needs to be established. As a logical continuation and follow-up action of the 'immediate reaction to safety problem' the safety directive provision has been retained and transposed under **ATM/ANS.AR.A.020**.

ATM/ANS.AR.A.025 on oversight reporting is based on Article 15 of Commission Implementing Regulation (EU) No 1034/2011. Based on the extensive discussion in the ATM.004 rulemaking group, it was considered that there is no need any more to produce a separate annual safety oversight report as required today. The competent authorities are required to contribute to the annual reports of the Member States as foreseen by Article 12 of Regulation (EC) No 549/2004 on the subject, which is considered as sufficient. The annual report required by Article 12 of Regulation (EC) No 549/2004 and the reporting required by the Performance scheme implementing rule is considered disproportionate and containing redundant information. Therefore, it is proposed not to require this separate report any longer. Moreover, it should be emphasised that this proposal is in line with the Commission's initiative as announced at the 47th meeting of the Single Sky Committee²⁹ on simplification of the annual reporting process by Member States on the implementation of SES aiming at avoiding the multiplication of reporting requests and to streamline those with the Agency's activities, namely standardisation inspection in the area of ATM/ANS.

Subpart B — Management

ATM/ANS.AR.B.005 establishes that the competent authorities need to have a management system in place. This management system includes the following fields of activity: policies and procedures, personnel, facilities, compliance monitoring function, responsibility for management, and the participation in the exchange of information with other competent authorities. Most elements of the management system are already common practice and the proposal has been developed to ensure consistency and compatibility not only with the current proposed rules in the field of aerodromes (EASA Opinion No 01/2013) and air traffic controller licensing (NPA 2012-18), but also, as far as practicable, with the relevant rules in the field of aircrew and air operations, as well as airworthiness. The proposed provisions take due account of the critical elements of a safety oversight system defined by ICAO, in particular as regards CE-3 (State civil aviation system and safety oversight functions), CE-4 (Technical personnel qualification and training), CE-5 (Technical guidance, tools and the provision of safety-critical information), CE-6 (Licensing, certification, authorisation and/or approval obligations), CE-7 (Surveillance obligations), and CE-8 (Resolution of safety concerns). The proposed requirements will, thus, ensure compliance with the relevant ICAO Standards on implementation of SSP for all EU Member States. One of the main objectives for introducing a management system is to ensure that risks are identified, assessed, and satisfactorily mitigated. The importance of this for civil aviation has been widely recognised within the European Union. This provision is of horizontal nature across aviation and, within this context, the Agency supports a holistic approach towards management systems, as being a fundamental element of the set-up of an authority. In line with the Commission initiative to streamline the reporting processes by the Member States and their competent authorities, the provision requires that the competent authority provides a copy of the procedures related to management system and its amendments for the purpose of standardisation. In order to facilitate the implementation of these requirements, the related AMC material is proposed. Commission Implementing Regulation (EU) No

²⁹ SSC/12/47/16 Agenda Item 9.6 1 October 2012 - Submitted by the European Commission.

1034/2011 is in line with ICAO CA-4, however, in order to facilitate the achievement of minimum knowledge and experience for the technical personnel performing safety oversight functions and the means to ensure continuing competence with the aim of maintaining and enhancing their competence at the desired level, ATM.004 rulemaking group considered the issue as essential and has emphasised the importance of the associated AMC on initial and recurrent (periodic) training for competent authorities' personnel and GM on determination of sufficient personnel, which are important elements of the management system.

- ATM/ANS.AR.B.010 addresses the allocation of certification and oversight tasks 83. by the competent authority to qualified entities and focuses on the criteria to be met by such entities. Such practice exists today in the ATM/ANS oversight pursuant to Regulation (EC) No 550/2004³⁰ and in accordance with Article 11 of Commission Implementing Regulation (EU) No 1034/2011. However, this provision is now tailored to fully implement Article 13 of the Basic Regulation and aims at guaranteeing that any certification or oversight tasks performed on behalf of the competent authority conforms with the applicable requirements, similar to what is required from organisations when contracting activities within their scope of certification. The associated AMC includes the requirement for the qualified entity being audited by the competent authority, which is a requirement today. However, the ATM.004 rulemaking group discussion led to the conclusion that this condition should remain a possibility, based on the competent authority's decision. In addition, the qualification criteria of the qualified entity's personnel have also been put at AMC level.
- 84. **ATM/ANS.AR.B.015** further elaborates ATM/ANS.AR.B.005 with regard to the changes in the management system of the competent authorities.
- 85. Commission Implementing Regulation (EU) No 1034/2011 regulates the activities of the competent authorities related to safety oversight records. **ATM/ANS.AR.B.025** introduces harmonisation across all aviation domains and details the requirements in order to guarantee proper storage, accessibility, and traceability of the whole scope of competent authority's activities, as well as the certificates issued.

Subpart C — Oversight, certification, and enforcement

- 86. This Subpart **ATM/ANS.AR.C** provides the necessary elements to the competent authority on how to interact with regulated ATM/ANS providers and the Network Manager. It describes the process for handling the certification of the providers, and where applicable, the oversight and enforcement measures. It is partly based on the requirements of Commission Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011, complemented as necessary to implement the Basic Regulation. The provision is based on proposed procedures in Subpart B **ATM/ANS.AR.B** tailored to suit ATM/ANS community. This proposal is incorporated to enable risk-based oversight, taking into account proportionality according to the type and complexity of the services provided in accordance with Article 8b(7)(b) of the Basic Regulation.
- 87. **ATM/ANS.AR.C.005** on Monitoring of safety performance transposes the provision from Article 5 of Commission Implementing Regulation (EU) No 1034/2011. It should be noted that this provision has been initially transferred from Commission Regulation (EC) No 1315/2007³¹ and originates from ESARR 1³². It requires the

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).

Commission Regulation (EC) No 1315/2007 of 8 November 2007 on safety oversight in air traffic management and amending Regulation (EC) No 2096/2005 (OJ L 291, 9.11.2007, p. 16).

NSAs to monitor regularly and assess the levels of safety achieved in order to determine their compliance with the applicable requirements. After an assessment conducted by the Agency, the conclusion was that the essence of this provision requires clarification and, therefore, the proposal is the competent authorities to still regularly monitor and assess the ATM/ANS providers' safety performance, but as a consequence, the results of this monitoring can be used by the competent authorities in particular within their risk-based oversight.

- 88. **ATM/ANS.AR.C.010** on Certification, declaration and verification of ATM/ANS providers' compliance with the requirements is largely based on Article 6 of Commission Implementing Regulation (EU) No 1034/2011, but with some modifications to make it fit within the new structure and to implement the Basic Regulation properly. The main changes can be summarised as follows:
 - Paragraph (a) stipulates that the verification process needs to be established within the framework of the competent authority's management system (see ATM/ANS.AR.B.005(a)(1)). The reason is that one of the main subjects of the required management system concerns 'documented policies and procedures to describe (...) means and methods to achieve compliance with the Basic Regulation and its Implementing Rules'. As the verification process by definition is one of the main procedures of a competent authority, this should be clearly linked to this part of the management system, hence an addition to the original paragraph is required. To facilitate the mutual recognition of the ATM/ANS providers' certificates, a uniform format for such certificates is introduced, which is to be found in Appendix 1 to the draft Implementing Rule.
 - Organisations making declarations in addition to certified organisations have been added in paragraph (a)(3) in order to implement the competent authority's obligations stemming from Article 8b(3) of the Basic Regulation. Such declared flight information services providers require being also subject of a proper oversight by the competent authority, hence the addition to the original article is necessary.
 - A distinction is created between non-complying organisations that work under a certificate and under a declaration scheme. This aims at ensuring that the competent authority will take enforcement action if a declared organisation does not comply with the relevant regulation(s). It should be highlighted that such action could not be certificate-linked, as in declaration scheme 'environment' there is no possibility of e.g. limitation or revocation of a certificate.
- 89. **ATM/ANS.AR.C.015** on oversight is originally stemming from Article 7 of Commission Implementing Regulation (EU) No 1034/2011 and merged with Article 8 of Commission Implementing Regulation (EU) No 1035/2011, as the mentioned provisions, in a somewhat different wording, basically require the same. Furthermore, all competent authorities' related requirements have been merged into this Part-ATM/ANS.AR. With regard to paragraph (c) of ATM/ANS.AR.C.015, the rewording of the merged Article 7(3) of Commission Implementing Regulation (EU) No 1034/2011 and Article 8, paragraph 1 of Commission Implementing Regulation (EU) No 1035/2011 was necessary (e.g. 'under its supervision' instead of 'which it has certified') in order to bring the text in line with the common terminology and oversight criteria.
- 90. Thereafter, paragraph (c)(3) of ATM/ANS.AR.C.015 covers the oversight of personnel, especially ATSEPs. This requirement will ensure that the oversight

Eurocontrol Safety Regulatory Requirement (ESARR) 1 Safety Oversight in ATM http://www.eurocontrol.int/sites/default/files/content/documents/single-sky/src/esarr1/esarr1-e2.0.pdf

programme addresses this element of the ATM/ANS provider's management system as appropriate. Paragraph (c)(4) originates from Article 7(3)(c) of Commission Implementing Regulation (EU) No 1034/2011 which requires the oversight programme to ensure that audits are conducted in a manner commensurate with the level of the risk posed by the ATM/ANS providers' operations and services provided.

- 91. Paragraph (c)(5) of the Oversight provision sets out the requirements for the oversight programme to be linked to the level of risk posed by each ATM/ANS provider. The Agency is proposing two options and wishes to hear from interested stakeholders which opinion they would find more appropriate and for what reason. The proposal developed by the ATM.004 rulemaking group is based on Article 7(3)(d) of Commission Implementing Regulation (EU) No 1034/2011 and has been reworded with 'sample' potential in order to introduce an possibility for risk based oversight. The reason for this is that more and more risk-based oversight of ATM/ANS providers is being promoted and introduced in practice. However, the original text of Commission Implementing Regulation (EU) No 1034/2011 could be interpreted that, within a timeframe of two years, audits would need to be undertaken on all regulated activities carried out by the providers and covered with all articles of the common requirements, regardless of the ATM/ANSP's performance and its adherence to the applicable requirements. As this would be not fully in line with the principles of risk-based oversight, the possibility to 'sample each organisation (...) in a manner commensurate with the level of risk posed (...)' has now been introduced. This new possibility ensures that CAs/NSAs are able to base their oversight programme on a risk assessment, instead of automatically having to audit each provider against all requirements over a period of two years.
- 92. However, the Agency is of the opinion, that with a view towards the total system approach the requirements on risk-based (and performance-based) oversight could be further harmonised based on ARA.GEN 300 of the Aircrew Regulation³³. The recently proposed draft Implementing Rule on the licensing and medical certification of air traffic controllers also proposes the same approach. The alternative provision on subject takes into account the high-level requirements contained in the Basic Regulation.
- 93. The flexibility of performance-based oversight in Option 1 (see RIA Section 6) is extended with Option 2 towards more performance-based oversight as presented in the table below. Option 2, subparagraph (5) of ATM/ANS.AR.C.015 (c) introduces a maximum of 4 years oversight planning under certain conditions, instead of 2 years with Option 1 proposed by the rulemaking group. The Oversight in a performance-based environment is a new approach for the competent authorities to discharge their responsibilities, as it considers the criteria of the ATM/ANS providers' safety management implementation indicated in paragraphs (i) till (iv) in a controlled process. Therefore, a RIA has been developed to analyse the impact to the affected parties (see RIA Section 6). This controlled process is also linked to the introduction of a finding classification scheme, the level and frequency of these findings over an oversight planning cycle that will provide the control to adjust the planning in a next phase. However, it should be emphasised that before taking any decision by the CAs/NSAs on extension of the oversight cycle, a full 24-month oversight cycle of the certified ATM/ANS providers shall apply.

Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L311, 25.11.2011, p.1)

Option 0: Commission Implementing Regulation (EU) No 1034/2011, Article 7	Option 1: Flexible risk-based approach only for a period of two years	Option 2: Option 1 with extended flexibility of performance-based oversight			
3. Within the inspection programme required by Article 8 of Commission Implementing Regulation (EU) No 1035/2011, competent authorities shall establish and update at least annually a programme of safety regulatory audits in order to:	(c) The competent authority shall, on the basis of the evidence at its disposal, monitor annually the ongoing compliance of the ATM/ANS providers under its supervision. To this end, the competent authority shall establish, and maintain an oversight programme including audits, which shall:	(c) The competent authority shall, on the basis of the evidence at its disposal, monitor annually the ongoing compliance of the ATM/ANS providers under its supervision. To this end, the competent authority shall establish, and maintain an oversight programme including audits, which shall:			
(a) cover all the areas of potential safety concern, with a focus on those areas where problems have been identified;	(1) cover all the areas of potential safety concern, with a focus on those areas where problems have been identified;	(1) cover all the areas of potential safety concern, with a focus on those areas where problems have been identified;			
(b) cover all the organisations, services and network functions operating under the supervision of the	(2) cover all the ATM/ANS providers and services and network functions under the supervision of the competent authority;	(2) cover all the ATM/ANS providers and services and network functions under the supervision of the competent authority;			
competent authority;	(3) cover the oversight of personnel, including the air traffic safety electronics personnel (ATSEP);	(3) cover the oversight of personnel, including the air traffic safety electronics personnel (ATSEP);			
(c) ensure that audits are conducted in a manner commensurate to the level of risk posed by the organisations' activities;	(4) ensure that audits are conducted in a manner commensurate with the level of the risk posed by the ATM/ANS providers' operations and services provided;	(4) ensure that audits are conducted in a manner commensurate with the level of the risk posed by the ATM/ANS providers' operations and services provided;			
(d) ensure that sufficient audits are conducted over a period of 2 years to check the compliance of	(5) ensure that audits are conducted in sufficient number and depth over a period of two years to sample each organisation under its supervision in a manner commensurate with the	(5) ensure that for ATM/ANS providers under its supervision, an oversight planning cycle not exceeding 24 months is applied.			
all these organisations with applicable safety regulatory requirements in all the relevant areas of the functional system;	level of risk posed by each ATM/ANS provider; and	The oversight planning cycle may be reduced if there is evidence that the safety performance of the organisation has decreased.			
		For ATM/ANS providers certified by the competent authority, the oversight planning cycle may be extended to a maximum of 36 months if the competent authority has established that during the previous 24 months:			
		(i) the organisation has demonstrated an effective identification of aviation safety hazards and management of associated risks; and			
		(ii) the organisation has continuously demonstrated under ATM/ANS.OR.A.035 that it has full			

Option 0: Commission Implementing Regulation (EU) No 1034/2011, Article 7	Option 1: Flexible risk-based approach only for a period of two years	Option 2: Option 1 with extended flexibility of performance-based oversight
		control over all changes; and (iii) no level 1 findings have been issued; and (iv) all corrective actions have been implemented within the time period accepted or extended by the competent authority as defined in ATM/ANS.AR.C.025.
		If, in addition to the above, the ATM/ANS provider has established an effective continuous reporting system to the competent authority on the safety performance and regulatory compliance of the organisation, which has been approved by the competent authority, the oversight planning cycle may be extended to a maximum of 48 months.
(e) ensure follow up of the implementation of corrective actions.	(6) ensure follow-up of the implementation of corrective actions.	(6) ensure follow-up of the implementation of corrective actions.

Note:

Text strikethrough **xx* in Option 0: text deleted and replaced in Options 1 and 2

Text highlighted in grey: draft alternatives

Stakeholders are invited to indicate their preferred option and to provide justification elements on the possible safety, social, and economic impact of the option proposed, or alternatively to propose another justified solution to the above issue.

- 94. At the end of paragraph (c), with paragraphs (7) and (8), a consultation clause and paragraph on envisaged interval of the inspections have been added in order to transpose Article 8, second part, of Commission Implementing Regulation (EU) No 1035/2011.
- 95. **ATM/ANS.AR.C.020** defines the interaction of the competent authority when ATM/ANS provider decides to implement organisational changes. When the competent authority receives an application for change to ATM/ANS provider requiring prior approval based on ATM/ANS.OR.A.035, it shall verify its compliance with the applicable requirements before issuing the approval. It should be emphasised that this is not a so called 'safety related change to the functional system' as described in Articles 9 and 10 of Commission Implementing Regulation (EU) No 1034/2011. These articles are not transposed in the NPA and will be replaced as explained in paragraph 103. If the ATM/ANS provider implements such changes without obtaining the required approval, the competent authority will have to take appropriate action. For these 'changes to be approved', straightforward requirements for the competent authority on their related tasks need to be developed. For this reason, ATM/ANS.AR.C.020(a) and (b) establish that the competent authority needs to verify the ATM/ANS provider's compliance with the applicable requirements before issuing the approval, as well as that it needs to act

- appropriately if the ATM/ANS provider implements the 'change to be approved' without receiving such an approval.
- 96. Regarding the changes not requiring prior approval, the controlled process proposed is twofold. First, the competent authority needs to approve a procedure developed by the ATM/ANS provider defining the scope of such changes, their management, and notification mechanism as part of its certification process. Then the information provided by the ATM/ANS provider when notifying such change does not have to be assessed immediately, but within the continuous oversight process. This provision aligns the authority requirements for ATM/ANS providers with those already existing in other aviation domains. This process strikes a balance between a reasonable amount of oversight by the competent authority on the one hand, and a reasonable amount of 'freedom to act' by the ATM/ANS providers on the other hand. Associated GMs are proposed to facilitate the implementation of these new requirements.

Stakeholders are invited to comment on GM1 ATM/ANS.AR.C.020 to consider whether this GM could be elevated as AMC and to provide justification elements on the possible safety, social, and economic impact associated to their proposal.

- 97. A dedicated provision on how the competent authority should handle findings raised providers proposed and corrective actions for the ATM/ANS is ATM/ANS.AR.C.025. This provision has been developed based on ARA.GEN.350 of the Aircrew Regulation and the requirements proposed in the draft Aerodromes Regulation (EASA Opinion No 01/2013). Article 8b(6)(c) of the Basic Regulation requires the Implementing Rule to specify the conditions for, among others, suspending or revoking a certificate of ATM/ANS providers. The current provisions of Commission Implementing Regulation (EU) No 1034/2011 (e.g. Article 6(2)) do not specify such concrete requirements. Therefore, new requirements containing concrete rules for possible suspension and revocation of certificates needed to be developed. This provision tailored to the oversight of ATM/ANS providers actually provides a convenient and straightforward system between findings and corrective actions on the one hand and possible suspension and revocation actions on the other hand considering the continuity of service. The proposal complements the current provisions in the existing regulations.
- 98. Furthermore, it should be stressed that ATM/ANS.AR.C.025 also introduces a requirement for the competent authorities to establish a system for categorising findings and deciding on enforcement measures, based on the safety risk posed by an ATM/ANS provider's and Network Manager's non-compliances. However, under certain circumstances, priority may be given to ensuring the continuity of services.
- Paragraphs (c) and (e)(1) of that provision introduce the requirements regarding 99. level 1 findings. A level 1 finding is to be issued by the competent authority in case of a serious non-compliance that poses a significant risk to flight safety or otherwise questions the organisation's fitness to continue operations. In case of a level 1 finding, the competent authority shall require corrective action from the ATM/ANS provider. Additionally, the competent authority shall take an immediate appropriate action, which may include limitation, suspension, or revocation of the certificate and, in case of the Network Manager, inform the Commission as well. However, the continuity of service in question should be ensured provided that safety is not compromised. Level 1 findings are not 'regular' findings for which a certain time period can be allowed to repair the non-compliance. These are very serious cases and, therefore, the competent authorities need to act directly to minimise the identified impact until the ATM/ANS provider has taken successful corrective action. This creates a balance between providing the competent authorities with sufficient powers to take all the necessary measures and ensuring that safety is not compromised on one hand, and not forcing them into actions that

- could jeopardise the continuation of the necessary services of ATM/ANS providers on the other.
- 100. With paragraphs (d), (e)(2), and (3), the requirements regarding level 2 findings are introduced. A level 2 finding is to be issued by the competent authority when any other non-compliance (not classified as level 1 findings) is detected with the applicable requirements, with the ATM/ANS provider's procedures and manuals, or with the terms of conditions of the provider's certificate. In case of a level 2 finding, the competent authority shall require a corrective action and implementation plan by the ATM/ANS provider (this is actually in line with the current Article 8 of Commission Implementing Regulation (EU) No 1034/2011, including a proposed implementation period. If the assessment of the ATM/ANS provider's plan concludes that this is sufficient to address the non-compliance, the competent authority shall accept it. On another hand if the ATM/ANS provider fails to submit an acceptable corrective action plan, or fails to implement it, the competent authority has the power to act accordingly, e.g. elevating the finding to level 1 (since the impact of level 2 findings is less direct and grave as that of a level 1 finding). For this reason, and for the reason of proportionality in case of a level 2 finding, the ATM/ANS provider shall be allowed in a reasonable amount of time commensurate with the action needed to repair the non-conformity. This system provides for a balanced and proportional approach to 'regular' findings allowing the ATM/ANS providers to undertake corrective actions in a manner that is the most suitable within their operational environment. Associated GM for the purpose of facilitating the implementation of this provision is also proposed.
- 101. The proposals related to Safety oversight of changes to functional system (ATM/ANS.AR.C.030) and Review procedure of proposed changes (ATM/ANS.AR.C.035) will be provided as a result of the rulemaking tasks RMT.0469 and RMT.0470 as explained above.
- 102. Part–ATM/ANS.AR contains **Appendix 1**, which proposes the standard certificate form for the ATM/ANS provider. With the introduction of this single certificate concept, all the privileges of an ATM/ANS provider are mentioned in the attachment to the certificate specifying the types of services provided. This would facilitate the mutual recognition of certificates, as it is also stemming from Article 11 of the Basic Regulation.

AMC and GM to Part-ATM/ANS.AR

103. A very large part of the proposed AMC and GM to Part-ATM/ANS.AR derive from the existing (or proposed) AMC and GM in other aviation domains such as aircrew and air operations and recently proposed for air traffic controller licensing (NPA 2012-18). The Agency believes that this is not only an important safety aspect but that it also facilitates the work and resourcing of the NSAs, which in most cases are a part of the national CAA responsible of the oversight in all aviation domains. Different authority requirements should, therefore, be limited to cases where it is clearly needed for specific reasons. For this purpose and in order to foster flexibility as necessary, some items stemming from the current Commission Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011 were considered better placed at AMC, rather than IR level.

CHAPTER 5 — Annex II — COMMON REQUIREMENTS FOR THE PROVISION OF ATM/ANS (Part-ATM/ANS.OR)

104. This chapter explains in detail the proposed requirements in Annex II to the draft regulation — COMMON REQUIREMENTS FOR THE PROVISION OF ATM/ANS (Part-ATM/ANS.OR). As already explained above, this Annex is based on Annex I to Commission Implementing Regulation (EU) No 1035/2011 but introduces new proposed requirements in order to implement the Essential Requirements in point

- 5(a) of Annex Vb to the Basic Regulation. It is proposed to implement these requirements in a manner which is harmonised, as far as found necessary, with the requirements applicable to other fields of aviation such as aircraft operations, aerodrome operations, and also air traffic controller training organisations³⁴.
- 105. The proposal extends Annex I to today's Regulation to cover all ATM/ANS providers. However, as it is explained in paragraph 131, not all requirements contained in the present Annex I to Commission Implementing Regulation (EU) No 1035/2011 are considered appropriate to be made applicable to all ATM/ANS providers, and, therefore, the applicability of some of the requirements have been limited to ANSPs and ATFM providers only. That is the reason why this Annex was divided into three subparts as subpart C is applicable to ANS and ATFM providers only.
- 106. The content of this Annex was developed by WG03 of ATM.001 RMG, and was reviewed several times by the rulemaking group ATM.001. Those provisions, for which no consensus has been found in the ATM.001 RMG, are highlighted below.

SUBPART A — GENERAL COMMON REQUIREMENTS (ATM/ANS.OR.A)

- 107. This subpart contains the general requirements which are applicable to all ATM/ANS providers.
- 108. **ATM/ANS.OR.A.005** complements the proposed Article 4 of the Cover Regulation by establishing the scope of the whole Annex and addressing who has to comply with it.
- 109. **ATM/ANS.OR.A.010** 'Application for an ATM/ANS provider certificate' originates from Article 4 of Commission Implementing Regulation (EU) No 1035/2011 on 'Granting of certificates'. It is amended to reflect the fact that this is only applicable to ATM/ANS providers and not to competent authorities. The provisions related to the acts by the competent authority when receiving an application for an ATM/ANS provider certificate has been placed in Annex I to the new proposed regulation and not in this article of Annex II.
- 110. **ATM/ANS.OR.A.015** 'Application for a limited certificate' is a new article proposed to replace Article 5 of Commission Implementing Regulation (EU) No 1035/2011 on derogations. Today's Regulation allows Member States to apply derogations from certain requirements to the following providers:
 - air traffic services providers, when they provide or plan to provide services only with respect to one or more of the following categories:
 - a. aerial work;
 - b. general aviation;
 - c. commercial air transport limited to aircraft with less than 10 tonnes of maximum take-off mass or less than 20 passenger seats; and/or
 - d. commercial air transport with less than 10 000 movements per year, regardless of the maximum take-off mass and the number of passenger seats.
 - air navigation service providers, other than providers of air traffic services, with a gross annual turnover of EUR 1 000 000 or less in relation to the services they provide or plan to provide; and

Requirements can be found in NPA 2012-18 which is published under: http://easa.europa.eu/rulemaking/notices-of-proposed-amendment-NPA.php

 air navigation service providers providing aerodrome flight information services by operating regularly not more than one working position at any aerodrome.

When one Member State decides to derogate these providers from certain requirements, the validity of their certificate is limited to the airspace under the responsibility of that Member State.

The proposed provisions for limited certificate of providers keeps the same conditions and spirit as those in Article 5 of today's Regulation on derogations. The only difference is that the 'certificate with derogation' is replaced by a 'limited certificate'. The end result is the same. However, the concept of a certificate with limitation is better aligned with the scheme foreseen in Article 14 of the Basic Regulation for derogations. Indeed, derogations under the Basic Regulation shall follow a specific approval procedure through the European Commission and the relevant Committee. If this procedure had been kept as a derogation, this would not have been aligned with the Basic Regulation.

- 111. ATM/ANS.OR.A.020 'Continued validity' is a new element in relation to the validity of the certificate of the ATM/ANS provider. The proposal is to maintain the validity of the certificate unlimited subject to the provider being in compliance with the applicable requirements. In this respect, the current Commission Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011 have been implemented within the Member States in various ways; certificate validities vary from 1 or 2 years (based on the oversight programme) up to 5 or 6 years. In some other cases, the certificates are unlimited. The Agency would like to propose an unlimited validity to the ATM/ANS provider certificate in order to facilitate and promote the implementation of a risk-based oversight scheme by the competent authority, and also to ensure a continuous oversight based on the identified-risks instead of an oversight aiming at ensuring compliance and closing the findings only at the moment of the re-certification process. Moreover, ATM/ANS providers' own management system aims at ensuring that they achieve the objectives for the provision of the services and continuously comply with the applicable requirements (i.e. compliance monitoring system). This is also supported by the fact that providers also have to develop performance indicators with regard to their management system and also with regard to the provision of their services. The analysis of these performance is used by the providers for their continuous improvement. This approach also avoids unnecessary (or non-prioritised) use of valuable resources (provider and competent authority) in a re-certification activity. Instead, these resources can concentrate in high-risk areas. This proposal is also aligned with other fields of aviation such as aerodromes, ATCO training organisations, aircraft operators, and initial and continuing airworthiness organisations.
- 112. **ATM/ANS.OR.A.025** 'Declaration by flight information services providers' implements Article 8b(3) of the Basic Regulation. It provides a possibility for a flight information services (FIS) provider to declare its activities if so allowed by the Member State responsible for the airspace in which the provider provides its services. The proposed provision complements the new Article 6 of the Cover Regulation by adding the requirements a FIS provider shall comply with in order to declare its activities. It is important to highlight that the list of applicable requirements are the same with the requirements applicable to FIS providers (aerodrome flight information services operating regularly not more than one working position at an aerodrome) who are eligible to apply for a limited certificate).
- 113. **Appendix I to Annex II** (Part-ATM/ANS) contains a proposed form for the declaration to be sent by the FIS provider to the competent authority.

- 114. **ATM/ANS.OR.A.030** 'Demonstration of compliance' originates from Article 6.1. of Commission Implementing Regulation (EU) No 1035/2011. The only change in the provision is that the term 'organisation' has been replaced by the term 'ATM/ANS provider'. Paragraph 2 of the former Article 6 has been included in ATM/ANS.OR.A.035 Changes. Paragraph 3 of the same article has been reflected in the competent authority requirements (ATM/ANS.AR.C.025) and also in the ATM/ANS provider requirements (ATM/ANS.OR.A.050) Findings and corrective actions in order to address the action-reaction between the competent authority and provider.
- 115. **ATM/ANS.OR.A.035** 'Changes'. As already explained in paragraph 115, the first point of this provision originates from the former paragraph 2 of Article 6 of Commission Implementing Regulation (EU) No 1035/2011. It is important to highlight that this proposal deals with the changes in general terms but does not address the specific procedure for managing changes to ATM functional systems³⁵. These type of changes are mainly changes to the conditions attached to the certificate or to the management system of the provider. The proposed provision foresees that the provider shall agree with the competent authority on the procedure for managing such general changes. This procedure needs to identify the following:
 - the changes that need to be notified to the competent authority and for which prior approval³⁶ is needed before they can be implemented;
 - the changes that need to be notified to the competent authority but for which prior approval from that authority is not required before they can be implemented; and
 - changes that are neither needed to be notified to the competent authority, nor prior approval is needed for them before they can be implemented.

The AMC to this provision contains the provisions related to this procedure while for other fields of aviation, such as aerodromes and air traffic controller training organisations, this procedure is proposed at IR level. This was the compromise found within the respective rulemaking groups as no clear consensus was reached. Therefore, the Agency has kept the proposal as AMC and seeks for further stakeholders' views on this item. This proposal goes also hand in hand with the requirements for the competent authority in ATM/ANS.AR.C.020.

Stakeholders are invited to comment whether the proposed `AMC1 ATM/ANS.OR.A.035(b) Changes' should be elevated to IR level and align it with the requirements being proposed for other fields of aviation such as aerodromes or air traffic controller training organisations and being today applicable in the field of aircraft operations and flight crew license training organisations.

- 116. **ATM/ANS.OR.A.040** 'Changes to the functional system' is provided as a placeholder for the outcome of the separate rulemaking task dealing with the issue.
- 117. **ATM/ANS.OR.A.045** 'Facilitation of inspections, audits, and access' originates from the first part of Article 7 of Commission Implementing Regulation (EU) No 1035/2011. The rest of this article has been included in the new proposed Article 5, paragraph 5, of the Cover Regulation. The original paragraph has been split into the requirements for the Member States that have been located in the Cover Regulation and the requirements for providers mentioned in this article.

This will be the separate subject of rulemaking tasks RMT.0469 and RMT.0470.

The form of approval and how to issue it is not specified in the regulation and, therefore, the act from the competent authority is left out to the Member States to decide.

- 118. **ATM/ANS.OR.A.050** 'Findings and corrective actions'. This provision is to clarify what are the actions expected from the ATM/ANS provider when the competent authority raises a finding in accordance with ATM/ANS.AR.C.025. This provision is based on Article 8 'Corrective actions' of Commission Implementing Regulation (EU) No 1034/2011. However, it has been amended to better reflect the actions expected from the provider. This provision is aligned with a similar provision existing already in the field of aerodromes, ATCO training organisations, aircraft operations, and air crew.
- 119. **ATM/ANS.OR.A.055** 'Immediate reaction to a safety problem'. As foreseen in the Basic Regulation, the competent authority shall react to identified safety problems. The requirements for the competent authority are contained in ATM/ANS.AR.A.015(c). This new proposed provision is a requirement for the provider to implement those safety measures (e.g. safety directives) mandated by the competent authority. This proposal is also aligned with similar provisions applicable in the other fields of aviation.
- 120. **ATM/ANS.OR.A.060** 'Safety reporting' is a new proposed requirement which derives from the implementation of Directive 2003/42/EC on occurrence reporting in the field of ATM/ANS. The reason for proposing this requirement as part of the safety rules is to ensure that the management of occurrences is an integral part of the system for managing safety and also to ensure a harmonised implementation of the provisions related to occurrence reporting and the relation with the competent authorities as the directive needs to be implemented in each Member State through their national legislation. This provision does not replace the national regulations transposing the Directive but complements them. The proposed requirement also clarifies the situation with regard to ATM/ANS providers for which the competent authority is the Agency, whose activities are not covered by Directive 2003/42/EC. This provision is also aligned with other fields of aviation.

SUBPART B — MANAGEMENT (ATM/ANS.OR.B)

- 121. This subpart contains the requirements which are applicable to all ATM/ANS providers.
- 122. **ATM/ANS.OR.B.005** 'Technical and operational competence and capability'. This provision derives from paragraph 1 of the requirements in Annex I to Commission Implementing Regulation (EU) No 1035/2011. The only change is that the word 'organisation' has been replaced by the words 'ATM/ANS provider'.
- 123. **ATM/ANS.OR.B.010** 'Organisational structure'. This proposed requirement derives from paragraph 2.1 of the requirements in Annex I to Commission Implementing Regulation (EU) No 1035/2011. The only change is that 'air navigation service provider' has been replaced by 'ATM/ANS provider' During the drafting of the provisions, the Agency has tried to maintain as far as possible the existing requirements in Commission Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011. However, when complementing these requirements with some more specific requirements for the management systems, the Agency recognises that this provision would have better related to the personnel requirements rather than organisational structure requirements. If the Agency had followed this approach, it would have better aligned with other fields of aviation such as aerodromes and air traffic controller training organisations. Based on the consensus found within the rulemaking groups, the Agency finally decided to maintain the original requirement.
- 124. **ATM/ANS.OR.B.015** 'Management system'. As already explained in paragraph 45, this provision replaces the existing requirements for the safety and quality management of services with a more comprehensive management system requirement. It is important to highlight that the Basic Regulation requires all

ATM/ANS providers to have in place a risk-based management system. Neither today's regulation, nor ICAO require all providers to have in place a safety management system but a quality system. In addition, today's Regulation requires ATS and CNS providers to have a safety management system. Therefore, the intention of the Agency has been to build the regulation so that it allows integration of all the management systems being required if the regulated organisation so wishes. In order to facilitate such integration, the Agency has taken ICAO SMS framework as a basis and has generalised it in order to be applicable to all ATM/ANS providers. In addition, some elements from paragraph 3 (e.g. paragraph 3.1) of Annex I to today's Regulation have been maintained as they did not find the equivalent in ICAO SMS framework. There are elements from the ICAO SMS framework, such as requirement for an Emergency Response Plan (ERP) and requirements for risk assessment and mitigation that have not been included in these general management system requirements because ATM/ANS providers other than ATS and CNS providers cannot comply with them since their management system aims at managing the quality of their services. ATM/ANS providers also need to establish formal interfaces with the relevant stakeholders to identify the aviation safety hazards entailed by their activities, to evaluate them, and to manage the associated risks as appropriate. The reference to EN ISO 9001 certificate, issued by an appropriately accredited organisation, in order to cover the provision of ATM/ANS by the provider has been moved to AMC (as its meaning in this context also suggests). It is important to mention that some rulemaking group members proposed deleting this requirement (even as AMC) since some of the ISO certificates, where issued, did not sufficiently cover the provision of ANS, therefore, they were not considered by the NSA as AMC. However, the compromise solution found by the Agency is to maintain this provision as AMC (AMC1 **ATM/ANS.OR.B.015** 'Management system').

Stakeholders are invited to comment whether the proposed AMC1 ATM/ANS.OR.B.015 'Management system' should be kept or removed and to provide justifications for it.

- 125. **ATM/ANS.OR.DB.020** 'Contracted activities'. This is a new provision necessary for all ATM/ANS providers to manage the activities they contract out to other organisations (which may, or may not, be certified to carry out such activities). The provision is necessary to ensure that the contracted activities are also carried out in accordance with the applicable requirements and to ensure that the competent authority is provided access to the subcontractors' facilities and data for oversight purposes (e.g. this could be done by the ATM/ANS providers by including such requirement in the contract with the organisation). With the introduction of this requirement, the term 'operating organisation' is not needed anymore, neither the provisions under paragraph 3.1.2(e) of Annex II to Commission Implementing Regulation (EU) No 1035/2011 as it is considered that the need to assess the safety implications of the use of external services or suppliers is covered by this new proposed provision.
- 126. **ATM/ANS.OR.B.025** 'Human resources'. This provision derives from Article 5 'Human Resources' of Commission Implementing Regulation (EU) No 1035/2011. The differences are that the term 'air navigation services providers' is replaced by 'ATM/ANS providers' and that there is a reference to the relevant paragraph of the management system dealing with the training of personnel. This proposal would maintain the requirements from current regulation without any significant changes. However, it should be emphasised that the proposed management system requirements, and in particular ATM/ANS.OR.B.015(a)(6), together with the requirements for ATS and CNS providers contained in ATS.OR.220 'Safety requirements for engineering and technical personnel undertaking operational

safety related tasks', could be considered as fully covering the same subject and, therefore, making this provision unnecessary. Therefore, the Agency would like to seek stakeholders' views on this point.

Stakeholders are invited to comment whether the proposed ATM/ANS.OR.B.025 'Human resources' should be kept or removed taking into account the requirements introduced in the management system ATM/ANS.OR.B.015(a)(6) and in ATS.OR.220 and the justification for it.

- 127. **ATM/ANS.OR.B.030** 'Facilities requirements'. This is a general requirement aiming at implementing point 5(a) of the Essential Requirements in Annex Vb to the Basic Regulation. This is, indeed, not considered as a new requirement as such, because it is covered as an element of the quality management system of the organisation. The requirement has been kept very general because of the different nature of various services and functions covered under ATM/ANS. If needed, further AMC or GM could be developed for each type of service.
- 128. **ATM/ANS.OR.B.035** 'Record keeping'. This requirement aims at implementing point 5(a) of the Essential Requirements in Annex Vb to the Basic Regulation. This is, indeed, not considered as a new requirement as such, because record keeping is covered as an element of the quality management system of the organisation. The proposed provision does not specify the records that need to be kept per type of services. This allows the ATM/ANS provider during the establishment of the management system to identify the list of records it would need to keep, taking into account their services. This list needs then to be submitted to the competent authority for approval. The provision contains 5 years of retention period for the records. This proposal is in line with other fields of aviation, such as aerodromes, air traffic controller training organisations, aircraft operations, and aircrew.
- 129. **ATM/ANS.OR.B.040** 'Operations manuals'. This requirement derives from paragraph 3.3 Operations Manual of Annex I to Commission Implementing Regulation (EU) No 1035/2011. It is considered very important to keep this requirement as the operations manual contains the operational procedures to be used by the operational personnel for the provision of the services. The changes introduced are the replacement of air navigation services providers by ATM/ANS providers and some minor amendments to clarify the intent of (b)(3) of this article based on the implementation feedback received from experts.

SUBPART C — SPECIFIC ORGANISATIONAL REQUIREMENTS FOR ANS AND ATFM PROVIDERSU (ATM/ANS.OR.C)

- 130. All the articles in this subpart originate from Commission Implementing Regulation (EU) No 1035/2011, including requirements for business, annual, and performance plans; security management; financial strength; liability and insurance cover; open and transparent provision of services; contingency plans and reporting requirements. Based on the outcome of the discussions within the rulemaking groups, the proposal is to apply the same requirements to ATFM providers as is applicable to the Network Manager based on Commission Regulation (EU) No 677/2011. The NPA, therefore, maintains the established regulatory coverage to apply these requirements to all ANSPs and the Network Manager, but would extend them applicable to providers of tactical ATFM on national level (which aspect is covered by point 2(g) of in Annex Vb to the Basic Regulation).
- 131. **AMC/GM to Annex II**. In order to facilitate compliance with the new proposed requirements and to clarify their intent, some specific AMC and GM explaining the concept and providing examples are proposed. This is mainly based on the best practises already existing in the field of ATM/ANS.
- 132. It is also necessary to highlight that for some of these requirements (such as the requirement for continued validity or the requirements for managing changes in

general) no full consensus has been found amongst the rulemaking groups' members. Nevertheless, the Agency considers necessary to submit the best compromise found for these proposals for public consultation in order to gather the broader views of the stakeholders.

CHAPTER 6 — SPECIFIC REQUIREMENTS FOR THE PROVISION OF AIR TRAFFIC SERVICES (Part-ATS)

- 133. This chapter explains in detail the proposed requirements in Annex III to the draft regulation. As already explained in Chapter 2 of this Explanatory note, this Annex is based on Annex II to Commission Implementing Regulation (EU) No 1035/2011 but reorganises and complements the existing SMS requirements to make them more aligned with the relevant ICAO SMS framework. It also introduces some new requirements in order to implement the specific provisions based on point 5(b) of Annex Vb to the Basic Regulation.
- 134. The reorganisation of the SMS requirements was initiated by the Agency and reviewed by ATM.001 rulemaking group. The proposals under section 3 of this annex were developed by a dedicated expert group supporting ATM.001.

SUBPART A — ADDITIONAL ORGANISATION REQUIREMENTS FOR THE PROVISION OF AIR TRAFFIC SERVICES (ATS.OR)

Section 1 — General requirements

- 135. **ATS.OR.105** 'Scope' clarifies that the requirements of this annex shall be complied with by ATS providers in addition to the requirements in Annex II.
- 136. **ATS.OR.110** 'Ownership and ATS.OR.115 Open and transparent provision of service' derives from paragraph 1 of Annex II to Commission Implementing Regulation (EU) No 1035/2011 without changes.

Section 2 — Safety of services

- 137. ATS.OR.205 'Safety management system'. These requirements originate from point 3.1 of Annex II to Commission Implementing Regulation (EU) No 1035/2011. They have been reorganised in order to align with ICAO SMS framework and to introduce the provisions coming from the ICAO SMS framework not included in the SMS framework existing in today's regulation. The table below explains the organisation of requirements in ICAO SMS framework and in Commission Implementing Regulation (EU) No 1035/2011. As also explained above, it was necessary to add some additional requirements not covered by the present SMS framework. Such are, for example, the requirement for the emergency response plan and the requirement for the ATS provider to monitor and assess the effectiveness of their SMS processes to enable continuous improvement of the overall performance of the SMS. The Agency believes that the absence of these requirements in the current SMS framework would necessitate notifying a difference to ICAO in relation to a standard in ICAO Annex 11. In addition, there are some SMS concepts, such as safety assurance, that have been approached in a different manner by the two SMS frameworks.
- 138. A more detailed cross reference table between ICAO SMS framework and the proposed requirements for management and safety management system can be found in Appendix IV to this Explanatory Note.

ICAO SMS framework			SMS framework in Commission Implementing Regulation (EU) No 1035/2011			
				3.1.1. General safety requirements		
1.	Safe	ty policy and objectives		(a)	(safety management);	
	1.1	Management commitment		(b)	(safety responsibility);	
	4.0	and responsibility		(c)	(safety priority); and	
	1.2	Safety accountabilities		(d)	(safety objective).	
	1.3	Appointment of key safety personnel				
	1.4	Coordination of emergency response planning	3.1.2.	Requirements for safety achievement		
				(a)	(competency);	
	1.5	SMS documentation		(b)	(safety management);	
				(c)	(quantitative safety levels);	
2.	Safe	Safety risk management		(d)	(SMS documentation);	
	2.1	Hazard identification		(e)	(external services and supplies);	
	2.2	.2 Safety risk assessment and mitigation		(f)	(risk assessment and mitigation); and	
3.	Safe	ty assurance		(g) (safety occurrences).		
	3.1	Safety performance monitoring and measurement	3.1.3.	1.3. Requirements for safety assurance		
	3.2			(a)	(safety surveys);	
	3.3	Continuous improvement of		(b)	(safety monitoring); and	
	3.3	the SMS		(c)	(safety records).	
4.	Safety promotion		3.1.4. Requirements for safety promotion			
	4.1 Training and education			(a)	(safety awareness);	
	4.2	Safety communication		(b)	(lesson dissemination);	
	1.2	Salety communication		(c)	(safety improvement).	

139. In this NPA, the Agency has made an effort to maintain as far as possible the formulation of the present SMS framework in Commission Implementing Regulation (EU) No 1035/2011. Due to the importance of this issue, the Agency would welcome stakeholders informed views specifically as regards the approach to SMS requirements.

Stakeholders are invited to comment whether to keep the draft SMS framework under ATS.OR.205 as proposed, or to redraft it using the wording in ICAO SMS framework. Stakeholders are also invited to provide the Agency with the justifications for their proposal.

- 140. **ATS.OR.210** 'Safety requirements for risk assessment and mitigation with regard to changes' and **ATS.OR.215** 'Software safety assurance system'. These provisions are currently placeholders that will be completed with the outcome of the rulemaking tasks RMT.0469 and RMT.0470. For the time being, the placeholders have kept the same titles with those in Annex II to Commission Implementing Regulation (EU) No 1035/2011. The titles can, however, be changed by the outcome of these rulemaking tasks.
- 141. **ATS.OR.220** 'Safety requirements for engineering and technical personnel undertaking operational safety-related tasks'. This provision comes from point 3.3 of Annex II to Commission Implementing Regulation (EU) No 1035/2011. However, the first paragraph of point 3.3 has been deleted because it is covered in the new proposed Annex XII to the draft regulation and a reference to this new Annex XII has also been added. In addition, the term 'operating organisation' has been replaced with the term 'subcontracted organisation' to be consistent with the changes introduced in Annex II.

Section 3 — Human factors principles for the provision of air traffic control service

General

- 142. It is recognised that human factors may significantly impact the performance of organisations and individuals involved in the safety of air operations. The legislator has identified this as a potential risk in the provision of ATM/ANS for which mitigating regulatory action is required.
- 143. This section contains proposals for measures implementing the Essential Requirements in point 5 'Service providers and training organisations', paragraph (b) of Annex Vb to the Basic Regulation.
- 144. The above mentioned paragraph (b) addresses conditions which may affect the provision of air traffic control service. It concerns specifically human factors' requirements in the field of fatigue and stress management, and requirements for the Air Traffic Control (ATC) service providers to establish procedures to deal with impaired cognitive judgement due to problematic use of psychoactive substances and reduced medical fitness of personnel providing ATC service.

Reduced medical fitness

- 145. The medical fitness of air traffic controllers is an integral part of their licensing scheme and according to requirements established in Chapter III of Commission Regulation (EU) No 805/2011³⁷. These requirements establish also the frequency at which medical checks for licensing purposes must be undertaken. However, the medical examination undertaken for certification purposes does not ensure that an air traffic controller is fit at all time between two of such medical examinations to exercise the privileges of the air traffic controller licence. The safety of the air traffic control service provision depends also on the air traffic controller to be aware of and declare being unfit for duty.
- 146. Point 5(b)(iii) of Annex Vb to the Basic Regulation requires the ATC service provider to have procedures in place to verify that air traffic controllers possess sufficient medical fitness when providing air traffic control service. The Agency developed regulatory proposals for the implementation of this essential requirement through the specific expert group, requesting that the ATC service provider establishes a procedure allowing the ATCOs to declare their insufficient medical fitness.

Commission Regulation (EU) No 805/2011 of 10 August 2011 laying down detailed rules for air traffic controllers' licences and certain certificates pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 206, 11.8.2011, p. 21).

- 147. The reduced medical fitness of air traffic controllers is currently regulated by Article 17 of Commission Regulation (EU) No 805/2011. However, this provision is not addressing the ATC service provider responsibility to ascertain the medical fitness of individuals but only to manage the operational impact of cases of reduced medical fitness.
- 148. On 22 November 2012, the Agency published its NPA 2012-18 that includes the regulatory proposal for the implementation of the Essential Requirements in the Basic Regulation on licensing and medical certification of air traffic controllers. Within that NPA, measures are proposed to address the reduced medical fitness (ATCO.MED.020) and the provisional inability (ATCO.A.015) of air traffic controllers.
- 149. In order to keep consistency and avoid duplications in the regulations, the Agency considered more appropriate to include measures implementing the essential requirement as in point 5(b)(iii) of Annex Vb on air traffic controllers' medical fitness in the regulation addressing licensing and medical certification of air traffic controllers. Therefore, the specific proposals for requirements implementing the said essential requirement of the Basic Regulation are now integrated in ATCO.A.015(e) and (f) of NPA 2012-18. In detail, it is proposed that ANSPs shall implement objective, transparent, and non-discriminatory procedures enabling air traffic controllers to declare a provisional inability to exercise the privileges of their licence (as defined in that draft regulation), to manage the operational impact of cases of provisional inability, and to inform the competent authority if the provisional inability has not been terminated according to the established procedures which have to be defined by the unit competence scheme of the ANSP.

Provisions overview

- 150. **ATS.OR.305** establishes the scope of the requirements proposed in this Section. Three human factors areas are identified for which the ATC service providers are requested to undertake preventive and mitigating measures to ensure safety, namely: fatigue, stress, and impaired cognitive judgement due to problematic use of psychoactive substances.
- 151. The Essential Requirements in point 5(b) of Annex Vb to the Basic Regulation use the term 'personnel providing ATC service' to identify the affected persons. WG06 associated the personnel affected by these requirements with air traffic controllers possessing a valid air traffic controller licence issued according to Commission Regulation (EU) No 805/2011 and providing air traffic control service at an operational air traffic control unit.
- 152. In order to provide air traffic control service with the appropriate level of efficiency and safety, the cognitive abilities and processing, including the judgement, shall be part of the air traffic controllers' expected performance at the appropriate level of awareness and efficiency.
- 153. There could be cases when these processes and abilities may be impaired for various reasons (stress, fatigue, use/abuse of medicines and/or psychoactive substances, others). They may lead the affected air traffic controller to a wrong assessment of the operational picture and to take and implement decisions not in line with established procedures and with the required safety standards, potentially or effectively resulting in hazards for the air operations.
- 154. While consequences of any impairment may have negative effects on safety, the regulatory perspective of the scope separates stress and fatigue from other reasons. As the management of the effects of stress and fatigue are dealt with in dedicated provisions (ATS.OR.320, ATS.OR.325, and ATS.OR.330), the other cases are limited to impairment of cognitive processing due to problematic use of psychoactive substances and are included in ATS.OR.315.

- 155. **ATS.OR.310** requires the ATC service provider to manage the operational risks of stress and fatigue of air traffic controllers by the safety management system. Fatigue and stress are human performance issues and influence individual performance of safety related tasks. There is evidence that stress and fatigue, if ignored or underestimated, may lead to significant safety occurrences. It is recognised that they cannot be eliminated and, therefore, must be managed.
- 156. Safety is the outcome of the management of a number of organisational processes. The management of these organisational processes has the objective of keeping safety risks under organisational control. Key in this perspective is the notion of safety as an outcome and safety risk management as a process.
- 157. For these reasons, an ATC service provider needs to manage processes that may induce fatigue and stress which may have an impact on the safety of the rendered service.
- 158. The provisions proposed in ATS.OR.310, ATS.OR.320, and ATS.OR.325 build on the experience of WG06 members in respect to the regulatory approach for fatigue and stress management and on the existing available scientific literature, as well as international standards.
- 159. Fatigue has been subjected to prescriptive and normative rules in several industries, including also aviation. However, such approach has been shown not to be able to incorporate the latest developments in scientific knowledge on human performance issues. Moreover, the characteristics of air traffic control units (size, operating hours, traffic loads, culture, social dialogue arrangements) vary significantly throughout the EU Member States. A one-size-fits-all solution with a prescriptive scheme would not render justice to these differences.
- 160. A different and more advanced approach is to manage risks via a Risk Management System. This is the approach ICAO has implemented with its Annex 6 to deal with flight crew fatigue. Fatigue Risk Management Systems (FRMS) represent a more comprehensive and performance-based approach incorporating the latest scientific understanding. It includes a multi-layered system of defences to reduce the risk of crew members becoming impaired due to fatigue. It also considers strategies to minimise the risks to safety when crew members do become impaired by fatigue.
- 161. However, the approach established for flight crew by ICAO requires significant effort and resources for its implementation which may be over-proportionate especially for smaller ATC service providers. Moreover, the transferability of FRMS to ATC service provision has not been established and validated by ICAO yet. ICAO was recommended by its Member States in ANC 12 to establish provisions for fatigue risk management for safety within ATS. The Agency will closely monitor the developments in this field which at the moment of the publication of this NPA .
- 162. ATS.OR.310 considers that fatigue and stress are safety risks and, therefore, they have to be managed by the safety management system of the ATC service provider. It is recognised that these risks cannot be eliminated and, therefore, must be managed appropriately by adequate mitigations means.
- 163. **ATS.OR.315** implements the essential requirement of the Basic Regulation in Annex Vb paragraph 5(b)(iii) stipulating that the ATC service provider shall have procedures in place to verify that the cognitive judgement³⁸ of air traffic controllers is not impaired when providing ATC service.

EASA Opinion No 01/2008 'Extension of the EASA system to the regulation of ATM and ANS' in Attachment 1 paragraph 67 provides an explanation of the intent of the aforementioned essential requirement it refers to; the impairment of the cognitive judgement is linked to the influence of any psychoactive substances.

- 164. It was also considered whether the term 'cognitive judgement' was appropriate and should be maintained in the proposed rule text or replaced with a scientifically more appropriate term 'cognitive process'. In fact, judgement is just one aspect of the cognitive process, although an important part of the overall human information processing system. In the end, the decision was to maintain cognitive judgement in the rule text for consistency purposes.
- 165. ICAO Annex 1 recognises the potential detrimental impact of the use of psychoactive substances by licensed personnel on aviation safety. In paragraph 1.2.7, licence holders are required not to exercise the privileges of their licenses while under the influence of any psychoactive substance and not to engage in their problematic use.
- 166. ICAO also recommends that its Contracting States ensure, as far as practicable, that licence holders engaging in any kind of problematic use of such substances, are identified and removed from their safety-critical function.
- 167. In accordance with ICAO Annex 1, provisions in ATS.OR.315 require the ATC service provider to implement a policy with related procedures for the prevention and mitigation of any effect of problematic use of psychoactive substances by air traffic controllers. Also, an AMC to these provisions listing the elements of such policy is proposed.
- 168. In addition, the ATC service provider is required to develop and implement an objective, transparent, and non-discriminatory procedure to detect cases of problematic use of psychoactive substances amongst air traffic controllers on duty. It has to be acknowledged that there could be situations where individuals may not be aware that they are under the effect of psychoactive substances, such as overthe-counter medication. An AMC to this provision listing the essential elements of the procedure to be established is provided.
- 169. Provisions in ATS.OR.315 do not remove the responsibility of the air traffic controller to be fit for duty or to declare any unfitness according to the existing licensing requirements in the EU legislation.
- 170. There is evidence that many ATC service providers across EU Member States have already implemented a procedure for the detection of problematic use of psychoactive substances. However, these procedures vary considerably from State to State. The Agency does not propose any detailed procedure while fully recognising the necessary flexibility in the application. However, in order to facilitate the development of an appropriate procedure, the Agency proposes GM using the ICAO Doc 9654 'Manual on prevention of problematic use of substances in the aviation workplace' which provides advice, in particular, as regards the development of the policy and in the selection of the most appropriate procedure.
- 171. As mentioned above, stressed air traffic controllers present a safety risk to the operations of an ATC service provider. GM to explain what stress is, its effects on humans and on the performance of air traffic controllers and their work is provided in GM1 to **ATS.OR.320**.
- 172. With this provision, ATC service providers are required to develop a policy on how to deal with the risk that stress poses on their operations, and how to mitigate it. The policy will need to be followed up with procedures to identify sources of stress for air traffic controllers inherent to the operations, and strategies to prevent, mitigate and monitor stress. As a further element, the ATC service provider then has to develop and implement educational and information programmes on the prevention of stress, from which air traffic controllers may of course also benefit outside of work.
- 173. Stress is a normal feature of life and service providers cannot be held responsible for stress employees are accumulating and experiencing outside work. Service

- providers, however, can influence the stress air traffic controllers are experiencing due to their work and working conditions. It is for this reason that ATS.OR.320(b) obliges the service provider to only identify sources of occupational stress and to deal with them and their effects.
- 174. This provision requires the service providers to manage stress due to critical incidents. Serious incidents or accidents, sometimes even minor events, may induce unusual and/or extreme emotional, physical, and behavioural reactions. Such reactions, while normal for a human being involved in the circumstances, may have negative effects on the safe performance of an air traffic controller and need to be mitigated in all cases. Programmes for the management of critical incident stress are already implemented by many ATC service providers and benefits are evident. This provision establishes the obligation for all ATC service providers to implement such a programme and to provide the relevant training.
- 175. The legislator has put emphasis on preventing air traffic controllers fatigue as it has a detrimental effect on the safety of air traffic control operations. **ATS.OR.325** establishes the related obligations for ATC service providers, with particular regard to occupational fatigue of air traffic controllers. Similarly to provision ATS.OR.320 on stress, the provider is required to manage fatigue by developing a policy and following the policy up with procedures and education.
- 176. The GM related to ATS.OR.325 contains extensive background information on fatigue, helpful for the understanding of the need for regulation and the implementation of the provision.
- 177. **ATS.OR.330** lays down the requirements for rostering systems which the service provider shall develop and implement with the objective to prevent and mitigate occupational fatigue.
- 178. According to ATS.OR.330(b), when establishing the system, the ATC service provider is required to involve air traffic controllers resulting in the roster acquiring experience; this involvement is particularly necessary for the evaluation of the safety issues concerning fatigue.
- 179. According to ATS.OR.330(c), the ATC service provider shall address in this activity the specific requirements in point 5(b)(i) of Annex Vb to the Basic Regulation relevant to its intended operations. ATS.OR.330(c) is amplified by the associated AMC, detailing the safety elements and criteria of the rostering system which should be determined by the ATC service provider.
- 180. It is recognised that a rostering system is established considering organisational elements which are not specifically addressed by this NPA, such as operating hours, traffic load, sectorisation, and air traffic controller availability. When considering these organisational elements into the rostering system, the ATC services provider needs to ensure consistency.
- 181. It has to be noted that the implementation of the essential requirement in point 5(b)(i) of Annex Vb to the Basic Regulation was not fully consensual in the related Working Group. A prescriptive definition of rostering schemes, with the precise definition of quantitative safety limits allowed for each of the elements of the rostering system, is now presented in AMC1 to ATS.OR.330(c); but this approach was considered not flexible enough to accommodate the different typologies of ATC units with their varying operating hours and traffic loads. Moreover, there was an objective difficulty in identifying such limits for each of the elements.
- 182. The proposal, therefore, was to define in the IR the elements and criteria which the ATC service provider has to consider when establishing the rostering system. No quantitative definition was provided for the elements in order to allow flexibility but a requirement was proposed for the definition of such quantitative definition through a risk assessment specific to air traffic controllers' fatigue to be performed

- by the air traffic service provider and to be approved by the competent authority. In consideration of the particular nature of this risk assessment, a proposal was made to the Agency to develop an ad hoc methodology via a dedicated rulemaking task which is initially included in the Agency's Rulemaking Programme as RMT.0486 and RMT.0491.
- 183. The comments received by some ATM.001 RMG members during the final consultation and the Agency internal review led to a change to this approach based on the concern raised by some stakeholders, reflected in ATS.OR.330(c) as detailed above. With the actual proposed measures, all requirements related to the risk assessment on the safety elements and criteria were removed, and the corresponding rulemaking task was put on hold.

SUBPART B - TECHNICAL REQUIREMENTS FOR THE PROVISION OF AIR TRAFFIC SERVICES (ATS.TR)

184. The provisions in ATS.TR.105 'Working methods and operating procedures' derive from Chapter 4 of Annex II to Commission Implementing Regulation (EU) No 1035/2011. The reference to ICAO Annex 2 has been replaced with a reference to the SERA Implementing Regulation as it transposes ICAO Annex 2 and some provisions in ICAO Annex 3 and also ICAO Annex 11 into the EU regulatory framework. However, since the rest of ICAO Annex 3 and ICAO Annex 11 have not yet been transposed into the EU regulatory framework, the references to Annex 11 as well as the reference to Annex 10 have to be kept in this provision. There references will be replaced with the technical requirements that are planned to be developed by the Agency via the rulemaking tasks referred to in paragraph 12. It is important to highlight that since the references to ICAO Annexes were last amended in 2010, there have been some amendments made by ICAO to these Annexes. The Agency proposes to update the existing references to ICAO Annexes up to the last amendment made to the Annexes. The review of the amendments to ICAO Annexes referred to in all annexes of this proposed regulation since June 2010 and the qualitative analysis of the potential impacts on the ANSPs is presented in Appendix V to this Explanatory Note.

Introduction of specific provision for ATS providers providing services to flight test

- 185. During the development of the proposals within this NPA, the Agency has been made aware of the specific needs required by ATS providers which provide ATS services to flight test and in particular when those flight test are carried out in cohabitation with other airspace users in controlled or non-controlled airspace.
- 186. While most of the existing requirements within the proposed regulation can be applied to them, the Agency recognises the need to allow the use of specific and alternative conditions and operating procedures subject to approval by their competent authority and which are necessary in order to provide an adequate and safe service to the flight test and to ensure the safety of the cohabiting traffic. The development of these conditions by the provider is based on the assessment of the identified risk and the establishment of the appropriate mitigation measures (e.g. experience requirements for the relevant air traffic controllers providing the services, specific equipment requirements).
- 187. Therefore, the Agency proposes a regulatory approach consisting of a particular privilege within their certificate (Appendix 1 to Annex I Certificate for Air Traffic Management/Air Navigation Service provider (ATM/ANSP) plus the approval of the special and alternative conditions and operating procedures by the competent authority based on the assessment carried out by the provider.

188. While the organisation of the service provision for flight test may vary from one Member State to another, the Agency's opinion is that such general scheme can be applied uniformly across the EU in order to support and facilitate the necessary flight testing of manufacturing industry within the European airspace ATS.TR.105(b).

CHAPTER 7 — SPECIFIC REQUIREMENTS FOR THE PROVISION OF METEOROLOGICAL SERVICES (Part-MET)

189. As mentioned above, the Agency proposes to replace the former Annex III to Commission Implementing Regulation (EU) No 1035/2011 with Annex IV which is divided into two subparts. The necessary requirements for MET providers are inserted in Subpart A.

The proposed rules for MET providers

- 190. The following paragraphs provide a summary of the proposed rules that are included in this Annex IV. The cross reference table in Appendix VI and the drafting documents in Appendix VII to this Explanatory Note to the NPA provides for more detailed justification of changes against ICAO Annex 3.
- 191. This subpart A contains the requirements for MET providers and is divided into two sections. While section 2 contains the requirements to be met by specific MET providers, section 1 contains general obligations that are applicable to all MET providers.

Section 1 — General requirements

- 192. This section only contains four requirements that have been identified as being general and should be applicable to all the MET providers identified in section 2.
- 193. **MET.OR.005** 'Scope and objectives of meteorological services'. This paragraph highlights the fact that MET providers need to comply with specific requirements laid down in this Annex IV in addition to those laid down in Annex II. It also defines the list of users who would benefit from the meteorological information necessary for the performance of their respective functions. The list was already contained in the former Annex III to Commission Implementing Regulation (EU) No 1035/2011 but has been extended to accident and incident investigation bodies and other entities. In order to range the scope of such entities, it was linked to ATM/ANS activities.
- 194. **MET.OR.100** 'Quality of the data and information' this paragraph reproduces the second paragraph of former Annex III to Commission Implementing Regulation (EU) No 1035/2011 related to the accuracy and distribution of the MET information. The words 'level of attainable' [accuracy] have been deleted as it was not sure whether this term provided sufficient clarity to enable compliance with the requirement. The Agency welcomes stakeholders' input on this provision.

Stakeholders are invited to comment whether the term 'level of attainable' [accuracy] should be maintained or removed and propose any other alternative wording that would provide the same objective.

- 195. **MET.OR.105** 'Retention of information'. This paragraph transposes the intent of paragraph 9.3.4 of ICAO Annex 3 with minor amendments to ensure coherence with other proposed requirements.
- 196. **MET.OR.110** 'Information exchange requirements'. This requirement reflects the intent of paragraph 11.1.2 of ICAO Annex 3 but some amendments have been made. The Working Group felt that it was necessary to rephrase this paragraph in order to better clarity the objective of the requirement.

Section 2 — Specific requirements

- 197. This section lays down the requirements to be met by the MET providers. It comprises meteorological watch offices, aerodrome meteorological offices, meteorological stations, volcanic ash advisory centres, world area forecast centres, and tropical cyclone advisory centres. Section 3.6 of ICAO Annex 3 on State volcano observatories has not been subject to a dedicated chapter for volcano observatories. However, the paragraphs of section 3.6 are transposed but have been reflected in the different specific MET providers' requirements where relevant.
- 198. **Chapter 1** 'Requirements for meteorological watch offices' (**MET.OR.200-210**). This chapter contains the general responsibilities of meteorological watch offices and responsibilities related to two specific tasks on SIGMET and AIRMET. It transposes section 3.4 of ICAO Annex 3 but includes paragraphs from ICAO Chapter 7 of Annex 3 (SIGMET and AIRMET information). The main obligations are to maintain continuous watch over meteorological conditions affecting flight operations and to disseminate SIGMET information and AIRMET information. Most of the changes made are purely editorial and the intent of the ICAO rules is maintained.
- 199. Chapter 2 'Requirements for aerodrome meteorological offices' (MET.OR.215-245). This chapter contains the provisions covered under section 3.3 of ICAO Annex 3 on meteorological office, as this section actually lays down the requirements for aerodrome meteorological offices. The main changes made to this section 3.3 reflect the need for better clarity of the responsibilities of aerodrome meteorological offices and better specify the scope of their obligations. This chapter also contains a number of GMs, mostly covered under Chapter 6 of ICAO Annex 3 -Forecasts – explaining terms or give complementary information to understand the requirements. It should be noted that several GMs have been taken from amended standards because the remaining text of the standard was considered to be more explanatory material rather than a requirement as such. The requirement on the notification of discrepancies to the WAFC (MET.OR.245) is transposed from Appendix 2 (Part II of ICAO Annex 3) with no changes. It is considered to be of significant importance due to the widespread use of this information by operators around the world, particularly in the flight planning stages, and the impact on the reliability of the MET information that is provided by the WAFC.
- 200. Chapter 3 'Requirements for meteorological stations' (MET.OR.250-255). This chapter contains provisions of Chapter 4 of ICAO Annex on Meteorological observations and reports. Some amended standards have been transposed to AMC level where was identified that the main objective was already sufficiently covered in the proposed Implementing Rule. Editorial changes have been made to align with the rest of the proposed requirements for this chapter. Although this Chapter 4 of ICAO Annex 3 has been subject to many changes, the responsibilities of meteorological stations remain as they are contained in ICAO Annex 3.
- 201. Chapter 4 'Requirements for volcanic ash advisory centres' (MET.OR.260). This chapter contains the provisions covered under section 3.5 of ICAO Annex 3. A few new paragraphs have been added to cover the entities that should be provided with the MET information by the VAAC. It takes into account the newly created European aviation crisis coordination cell and now includes operators. Also, elements taken from section 3.6 on State volcano observatories have been transferred to this chapter. There are no changes to the scope of their responsibilities under ICAO Annex 3.
- 202. **Chapter 5** 'Requirements for world area forecast centres' (**MET.OR.265**). This chapter contains the provisions covered under section 3.2 of ICAO Annex 3. There are no changes to the obligations laid down in the Annex. However, a requirement has been added that comes from a recommendation in section 11.3 of ICAO Annex 3 concerning the transmission of products in binary data communications. This recommendation has been upgraded to Implementing Rule to ensure the effectiveness of the information to be provided.

203. **Chapter 6** 'Requirements for tropical cyclone advisory centres' (**MET.OR.270**). This chapter contains the provisions covered under section 3.7 of ICAO Annex 3 and reproduces those provisions as such. A tropical cyclone advisory centre is located in an overseas territory of a Member State which has accepted responsibility from ICAO for the provision of service.

Final remarks

204. The proposed text has been prepared and agreed with the experts of WG02. The last meeting of WG02 took place in December 2011. The Agency also organised an additional meeting in April 2012 in order to review the text following the comments by the members of rulemaking group ATM.001. The Agency sent the final draft text to the members of WG02 after the summer of 2012. The experts of the WG02 have been informed of all the changes that occurred to the text before publication of this NPA.

The work of the subgroups has been reviewed by the members of the ATM.001 rulemaking group. During the last meetings of ATM.001, the members of this rulemaking group did not express any concern with regard to the MET draft rules.

CHAPTER 8 — Annex V — SPECIFIC REQUIREMENTS FOR THE PROVISION OF AERONAUTICAL INFORMATION SERVICES (Part-AIS) and Annex VII — SPECIFIC REQUIREMENTS FOR THE PROVISION OF COMMUNICATION, NAVIGATION, AND SURVEILLANCE SERVICES (Part-CNS)

- 205. Annex V on the provision of AIS and Annex VII on the provision of CNS originate respectively from Annex IV and Annex V to Commission Implementing Regulation (EU) No 1035/2011. The Annexes of today's Regulation are kept unchanged but in order to indicate that the provisions of these Annexes are to be applied by the respective providers in addition to the provisions laid down in Annex II, the scope articles (AIS.OR.105 Scope and CNS.OR.105 Scope) have been added to each Annex. The references from Annex VII to the relevant requirements related to the safety of services in Annex III have also been updated.
- 206. The references to ICAO Annexes have been amended and updated as already explained in paragraph 185.
- 207. These two Annexes will be amended and complemented with the technical requirements and operational procedure developed by the Agency under the umbrella of the relevant rulemaking tasks mentioned in paragraph 12.

CHAPTER 9 — ANNEX VI — SPECIFIC REQUIREMENTS FOR THE PROVISION OF DATA FOR AIRSPACE USERS FOR THE PURPOSE OF AIR NAVIGATION (Part-DAT), Annex IX — SPECIFIC REQUIREMENTS FOR THE PROVISION OF AIRSPACE MANAGEMENT (Part-ASM) and Annex X — SPECIFIC REQUIREMENTS FOR THE AIRSPACE DESIGN (Part-ASD)

- 208. The content of these three Annexes is reserved awaiting the result of the relevant rulemaking tasks described in paragraph 12. They have been added as placeholders in the new proposed structure.
- 209. Any new proposed requirements in these Annexes are to be applied by the affected ATM/ANS providers, when providing the relevant service, in addition to the requirements laid down in Annex II.

CHAPTER 9 — Annex VIII — SPECIFIC REQUIREMENTS FOR THE PROVISION OF AIR TRAFFIC FLOW MANAGEMENT (Part-ATFM) and Annex XI — SPECIFIC REQUIREMENTS FOR THE NETWORK MANAGER (Part-NM)

- 210. The new proposed Annex VIII will be amended as mentioned in paragraph 12 by RMT.0481 (IR) and RMT.0482 (AMC/GM) aiming at the implementation of Article 8b and the Essential Requirements in Annex Vb to the Basic Regulation. With this proposal, the temporary structure of this Annex only contains one subpart that includes a scope paragraph (ATFM.TR.105 Scope), to indicate that this Annex needs to be applied in addition to the requirements in Annex II, and reference to Commission Regulation (EU) No 255/2010 on its working methods and operating procedures.
- 211. The proposed Annex on the Specific Requirements for the Network Manager, Annex XI (Part-NM) is a reasonable step stemming from the implementation of the Basic Regulation, especially Article 8b(2), whereas ATM/ANS providers (including providers of ATFM) shall be required to hold a certificate. The ATM.004 rulemaking group, with the exception of one member, was of the opinion that all providers of ATFM shall be subject to certification. Therefore, the Network Manager being a provider of ATFM in a centralised manner (Pan-European manner) needs to be subject to the same requirements that the rest of the ATFM providers and needs, therefore, to be certified. The main change for the Network Manager is the certification by its competent authority before being subject to continuous oversight. Being a Pan-European ATFM provider and taking into account Article 22a of the Basic Regulation, the Agency will act as a competent authority for the certification and oversight tasks of the Network Manager.
- 212. This proposed Annex XI contains only a scope provision (**NM.TR.105 Scope**) which is to indicate that this Annex needs to be applied in addition to the requirements in Annex II, and working methods and operating procedures provision (NM.TR.110), which makes reference to Commission Regulation (EU) No 255/2010 and Commission Regulation (EU) No 677/2011 on the subject.

CHAPTER 10 — Annex XII — SPECIFIC REQUIREMENTS FOR ATM/ANS PROVIDERS REGARDING PERSONNEL TRAINING AND COMPETENCE ASSESSMENT REQUIREMENTS

213. This section proposes ATM/ANS provider requirements for the training and competence assessment of Air Traffic Safety Electronics Personnel (ATSEP).

Introduction

- 214. The legal basis for such proposed rules is Annex Vb (Essential Requirements for ATM/ANS and air traffic controllers) to the Basic Regulation which stipulates under point 5(a)(iv) that 'the service provider shall use only suitably qualified and trained personnel and implement and maintain training and checking programmes for the personnel'. The Agency is, therefore, mandated to propose rules for the ATM/ANS providers to ensure that ATM/ANS personnel are appropriately trained to perform their duties and that they are continuously assessed to maintain their competence.
- 215. There is currently no European regulation to ensure the training and assessment of competence of ATSEP. Today's Commission Implementing Regulation (EU) No 1035/2011 obliges ATS providers to 'ensure that technical and engineering personnel including personnel of subcontracted operating organisations who operate and maintain ATM equipment approved for their operational use have and maintain sufficient knowledge and understanding of the services they are supporting, of the actual and potential effects of their work on the safety of those services, and of the appropriate working limits to be applied.' In the current Regulation, this requirement also applies to CNS providers by reference in Annex V to these requirements. However, there are no harmonised requirements on how to

- ensure this objective. Moreover, recital 16 of Commission Implementing Regulation (EU) No 1035/2011 recognises common ATSEP requirements as one of the specific issues to be further evaluated through an EASA Opinion.
- 216. In 2008, in the framework of the EATM programme, EUROCONTROL developed the Specification for Air Traffic Safety Electronics Personnel Common Core Content Initial Training (ATSEP CCC) which contains the minimum training requirement for ATSEP Basic and Qualification Training. The ATSEP CCC provided support for ESARR5 requirement to ensure that 'technical and engineering personnel are properly trained and qualified to perform the assigned tasks'. At the same time, it was anticipated that the ATSEP CCC could serve as an adequate basis for any future European regulation dedicated to ATSEP in the framework of the common requirements regulation.
- 217. Subpart A of Annex XII proposes common safety rules to ensure the training and competence assessment of ATSEP in Europe. In order to achieve this, the Agency has made use of EUROCONTROL documents related to ATSEP training and competence activities. With regard to the initial training, the Agency has taken as a basis the ATSEP CCC. Concerning the System and Equipment (S/E) rating training, the Agency proposes very general requirements that are based on the EUROCONTROL Guidelines for ATSEP System/Equipment Rating Training Ed. 3.0 which contains material for the final training phase before undertaking assessment to achieve operational competence on particular systems and/or equipment. The Agency also proposes very general requirements for ensuring that ATSEP are provided with continuation training based on the EUROCONTROL Guidance for ATSEP Training Progression and Concepts Ed. 1.0 which is intended to complement the ATSEP CCC.
- 218. The Agency also considered the ICAO Training Manual on ATSEP Doc 7192-AN/857 Part E-2 which provides detailed information on the training and expertise required for personnel involved in the maintenance and installation of CNS/ATM systems.
- 219. The Agency did not intend to reinvent the wheel in the field of ATSEP training and competence assessment but to rely where appropriate to ICAO and EUROCONTROL material. It was, therefore, necessary to clearly define the scope of the proposed rules for ATSEP and to propose how to best integrate ATSEP CCC requirements in the EU regulatory framework.

The definition of ATSEP

- 220. The definition of ATSEP has been subject to many discussions at European level. The EUROCONTROL Safety Regulatory Requirements N°5 contains a general definition of 'ATM engineering and technical personnel undertaking operational safety related tasks' that can also be used to define ATSEP.
- 221. On its side, the ATM Working Group of the Sectorial Dialogue Committee defined ATSEP as 'personnel who have been proven competent to operate and maintain safety related CNS/ATM equipment that is approved for operational use.' Complementary information is also given to clarify the terms used in this definition.
- 222. Currently, European legislation does not define the term ATSEP. The only reference to ATSEP can be found in Commission Implementing Regulation (EU) No 1035/2011 (the common requirements regulation previously contained in Commission Regulation (EC) 2096/2005) as 'technical and engineering personnel including personnel of subcontracted operating organisations who operate and maintain ATM equipment approved for their operational use.'
- 223. Based on these considerations, the Agency proposes a slightly different way to define the scope of ATSEP tasks. While it is fully recognised that ATSEP 'operate, maintain, release and return into operations systems', the main change to the

- current definition is that the term 'safety related tasks' is replaced by the term 'safety related ATM/ANS systems'. This avoids misinterpreting the term 'safety related tasks' which has been controversial for many years. The ATM/ANS provider shall define what has to be considered as a safety-related system which is more related to the approach by ATS providers when conducting safety assessments and would maintain the necessary flexibility and subsidiarity at local level as necessary.
- 224. The Agency, therefore, proposes to define ATSEPs in ATSEP.OR.005(b) as 'Any authorised personnel who is competent to operate, maintain, release from, and return into operations safety-related ATM/ANS systems shall be considered to be an ATSEP'. This text is supported by several GMs clarifying all the terms.

The transposition of the ATSEP CCC

Reference versus transposition

225. This NPA proposes transposing the ATSEP CCC into the EU regulatory framework. A simple reference to the ATSEP CCC would have been either too prescriptive (if referred to in Implementing Rules) or not sufficiently ensuring the necessary harmonisation (if referred to in AMC) and would, in any case, not provide full legal certainty as well as would have caused more burden at State and NSA level. Furthermore, transposing the ATSEP CCC, allocating various elements therein into the most relevant regulatory material (IR/AMC/GM), allows the Agency to ensure proper maintenance of the document by keeping the necessary harmonisation and consistency with other relevant rules (SERA IR, CNS technical requirements, and the requirements for systems and constituents) in case of any changes. And most importantly, the proposed solution would allow sufficient flexibility and proportionality of the rules which would not be feasible if allowing the simple reference to the ATSEP CCC.

The transposition of the ATSEP CCC with no changes

226. The ATSEP CCC was developed to provide ANSPs with training objectives that would enable a common minimum standard of initial training for ATSEP. This document contains well-recognised material in many of the European Member States and the Agency fully acknowledged that many ANSPs in Europe currently use the ATSEP CCC as a basis to develop their ATSEP initial training programmes. The Agency does not intent to reinvent the wheel and simply proposes to transpose the ATSEP CCC in this section with no changes and only provide the minor necessary editorial and update changes.

Providing the necessary proportionality and flexibility to ATM/ANS providers

- 227. The transposition of the ATSEP CCC has been subject of a lot of discussions within the WG04 in order to find the right balance between the elements that were considered to be mandatory and those that were considered to be of non-binding nature. The proposed separation between IR and AMC divides subjects and topics in the IR, and sub-topics and objectives in the AMC/GM. This approach was, however, not shared unanimously by all the members of the WG and has also been challenged by some members of ATM.001 rulemaking group who considered that the proposed approach did not leave enough flexibility to ATM/ANS providers, in particular small-size providers.
- 228. Taking into account concerns expressed, the Agency proposes a balanced system that would guarantee that ATSEP will be properly trained for the duties they have to perform, and a system that is proportionate and ensures cost-efficiency as only the necessary and relevant training requirements need to be complied with.
- 229. The main principle on allocating the training material is the following: the subjects, topics and sub-topics of the ATSEP CCC are transposed at the level of IRs while the objectives (corpus, taxonomy and content) are transposed at AMC level. However,

this approach is further adapted to ensure the principle of proportionality of the rules that would apply to ATM/ANS providers taking into account their size, their location, or their operational needs. Therefore, the Agency considers that a maximum of flexibility needs to be given to ATM/ANS providers depending on the type of systems or equipment their ATSEP will be working on. For the Agency, the system must allow ATM/ANS providers to adapt the requirements to their operational needs.

230. The system proposed by the Agency is the following:

Basic training: all the elements of the Basic training are in the IRs. However, only the two first subjects ('Induction' and the 'Air traffic familiarisation') are mandatory for all ATM/ANS providers because they are considered to be the basics to any further selected subjects to be known by ATSEP. For the 9 other subjects, ATM/ANS provider can select the relevant subjects pertaining to its domain of activity or size. This system allows that ATM/ANS providers will be able to comply with the requirement taking into account their local environment. For instance, an ATSEP working for an organisation A and an ATSEP working for an organisation B, both need to know the elements contained in the Induction and Air traffic familiarisation (subjects 1 and 2). But, if ATSEP 'A' will only work on systems and equipment related to navigation this ATSEP will only need to receive the training related to subject 6 'Navigation' (in addition to subject 1 and 2). The same for ATSEP 'B', who, for example, will only work on aeronautical information services and meteorology, will only have to receive training on subject 3 (AIS) and 4 (MET) (in addition to subject 1 and 2). In both cases, ATSEP will only receive the relevant training that will allow them to perform their duties and no unnecessary training is required on the other subjects. In addition, an entry level criterion is introduced in the rules and will allow the ATM/ANS provider to also determine the number or level of mandatory subjects.

SUBJECT 1: INDUCTION SUBJECT 2: AIR TRAFFIC FAMILIARISATION	Mandatory for all ATM/ANS providers
SUBJECT 3: AERONAUTICAL INFORMATION SERVICES	
SUBJECT 4: METEOROLOGY	_
SUBJECT 5: COMMUNICATION	Mandatory ONLY if
SUBJECT 6: NAVIGATION	they are relevant to the work to be performed by the ATSEP
SUBJECT 7: SURVEILLANCE	
SUBJECT 8: DATA PROCESSING.	
SUBJECT 9: SYSTEM MONITORING & CONTROL	
SUBJECT 10: MAINTENANCE PROCEDURES	
SUBJECT 11: FACILITIES	

— Qualification training: the same principle applies for the qualification training. The subjects under the 'Shared' syllabus are mandatory for all ATM/ANS providers. The flexibility given here is that ATSEP do not need to be trained on all the streams but one stream as a minimum needs to be covered. It all depends on how many domains ATSEP will be working on. The Agency wished to maintain this flexible scheme in order to avoid unnecessary training in a system that would be neither cost-efficient, nor safer.

SHARED		
Subject 1: SAFETY		
Subject 2: HEALTH AND SAFETY	Mandatory for all	
Subject 3: HUMAN FACTORS	ATM/ANS providers	
Stream COM-VOICE		
Stream COM-DATA		
Stream NAV-NDB		
Stream NAV-DF		
Stream NAV-VOR		
Stream NAV-DME		
Stream NAV-ILS		
Stream NAV-MLS	Mandatory ONLY if relevant for the work to be performed by the ATSEP	
Stream SUR-PSR		
Stream SUR-SSR		
Stream SUR-ADS		
Stream DAT-DP		
Stream SMC-COM		
Stream SMC-NAV		
Stream SMC-SUR		
Stream SMC-DAT		

Introducing the ATSEP training for operational competence

- 231. The system/equipment (S/E) rating training is the final training phase for ensuring ATSEP competency. After completing the initial training phase, all ATSEP must have training specially oriented to the equipment and its environment. The system/equipment rating training is specific training that will provide training on systems and equipment used in the operational environment, allowing the ATSEP to gain valuable knowledge and skills. Each ATSEP who is rated on a specific equipment or system must receive the associated system/equipment rating training. As for the Initial training, there are no harmonised requirements at European level for system/equipment rating training, and in this case no EUROCONTROL Specifications exist. Today, air navigation service providers are developing many different ways to categorise the system/equipment ratings that apply to their ATSEP and, therefore, differences between Member States appear with regard to the way providers currently conduct their S/E rating training.
- 232. The requirements on S/E rating training proposed in this section are very general and cover the courses to be taught and the knowledge and skills to acquire to obtain the rating. As the S/E rating training is specific to the equipment and/or system and focuses on a specific area of required competence or on a specific ATSEP function, the proposed rules intend to impart system/equipment related knowledge and skills leading towards operational competence.

233. This section also takes into account that the S/E rating training is a phase ATSEP may complete more than once and depends on career choices, on the progression of ATSEP range of competence, on the upgrades or implementation of new systems/equipment, or on the relocation to another or new site or environment.

Introducing requirements for improvement of knowledge and skills

Annex Vb to the Basic Regulation stipulates that the service provider shall 'maintain training programmes' for its personnel. This is now introduced by the requirements on the continuation training which is designed to update the existing knowledge and skills of ATSEP. The proposed rules on continuation training reflect the need to provide training to operationally competent ATSEP to ensure that they have up-to-date operational knowledge and experience in all required topics. Continuation training is also referred to in Commission Implementing Regulation (EU) No 1035/2011 as: 'maintain sufficient knowledge and understanding of the services provided'.

234. This section also proposes a very general requirement on ATM/ANS providers to ensure that continuation training is given and includes refresher training, emergency training, and S/E upgrades or modifications training. As the latter provides knowledge and skills appropriate to a change in a job category, or a new discipline/new procedure, it is not considered as being a conversion training as it is sometimes referred to.

Ensuring the complete safety chain — the competence assessment

235. Annex Vb to the Basic Regulation gives a clear objective to develop rules for service providers to 'implement and maintain [...] checking programmes'. According to this Annex, ATM/ANS providers need to check that their personnel are competent. The term 'checking' used in the Basic Regulation is aligned with other aviation fields such as air operations or flight crew licensing. However, in the ATM field, 'checking' is better understood as 'competence assessment'. Therefore, the Agency has decided to use this term.

Today, no specific requirements are put on air navigation service providers to ensure the assessment of competence of ATSEP during and after the training. Commission Implementing Regulation (EU) No 1035/2011 refers to the 'sufficient knowledge and understanding of the services' that technical and engineering personnel need to 'have and maintain'. There is no clear indication on how they have to maintain their knowledge and understanding.

236. ATSEP competence assessment is an important process in the aviation safety chain. The objective of introducing competence assessment requirements in this NPA is to ensure that ATSEP have reached the appropriate level of competence at the end of the training phases. For the Agency, it is important that ATM/ANS providers ensure that ATSEP are competent and maintain their competency through an adequate test and evaluation programme to confirm their competence and to identify areas in need of improvement, as appropriate either in the individual or the system within which ATSEP work. This assessment needs to be done to ensure that they remain in current practice at operating and maintaining the ATM/ANS system/equipment they are qualified on.

The change to today's Regulation

237. The changes to the current Commission Implementing Regulation (EU) No 1035/2011 relate to the following three provisions: Article 9 (safety regulation of engineering and technical personnel), Point 3.3 of Annex II (safety requirements for engineering and technical personnel undertaking operational safety related tasks) and Point 2 of Annex V (safety of services). The amendments to those provisions are described here below.

- 238. Article 9 Safety regulation of engineering and technical personnel. This article is no longer necessary to be covered as it is addressed to the competent authority whose oversight role is covered in Annex I to the new proposed regulation. More specifically, the obligation to issue safety rules for engineering and technical personnel (Article 9(a)) is deleted as this obligation is now transferred to the Agency through the extension of competence to ATM/ANS. The entire Article 9 is, therefore, deleted.
- 239. Point 3.3 of Annex II Safety requirements for engineering and technical personnel undertaking operational safety related tasks. The first paragraph is deleted as it lays down the general safety requirements for engineering and technical personnel undertaking operational safety related tasks. It is now covered by point 5(a)(iv) of Annex Vb to the Basic regulation that stipulates: 'the service provider shall use only suitably qualified and trained personnel and implement and maintain training and checking programmes for the personnel'.
- 240. The other three paragraphs of Point 3.3 of Annex II are maintained unchanged in the proposed Annex III to the new proposed regulation.

Subcontracted personnel of operating organisation

- 241. Concerning the subcontracted 'personnel of operating organisation', no specific reference is made to the subcontracting elements in the proposed rules on ATSEP. Indeed, this point is considered already sufficiently covered in the proposed Annex II (General organisation common requirements for the provision of ATM/ANS) under ATM/ANS.OR.B.020 Contracted activities where it is clearly stipulated that 'When contracting or purchasing any part of its activity to external organisations, ATM/ANS providers shall ensure that the contracted or purchased activity, system or constituent conforms to the applicable requirements.' This means that personnel contracted by an ATM/ANS provider need to be trained and assessed competent to performs ATSEP duties. The ATM/ANS provider who contracts this personnel is responsible for verifying that these persons are appropriately trained and competent to perform their tasks and retain liability.
- 242. This new Annex XII is part of the new regulation and now clearly separates the service provision requirements from the personnel requirements. It allows for more clarity in the identification of the rules and eliminates the confusion contained in Commission Implementing Regulation (EU) No 1035/2011 where the provision of Point 3.3 of Annex II to Commission Implementing Regulation (EU) No 1035/2011 was located in such a way that it did not provide coherence with the rest of the provisions under this Regulation. Also, the provisions related to engineering and technical personnel were found under both Annex II (ATS) and Annex V (CNS).

Definitions

243. It has been identified that some of the terms used in the section on ATSEP, e.g. 'basic training', 'qualification training', 'competent', 'rating' need to be defined. However, these terms have not been transferred to **Article 2** (Definitions) of the proposed regulation but are explained in GM in the specific section related to ATSEP. The main reason is that some of the terms related to the ATSEP rules are also used in other regulations (e.g. ATCO rules) and to avoid any confusion, they have been kept in the ATSEP section as they are ATSEP specific terms.

The proposed rules on ATSEP

- 244. The following paragraphs explain, one by one, the proposed rules that are now covered by the new Annex XII.
- 245. **ATSEP.OR.005** 'Scope' . The scope specifies who is an ATSEP. A person is considered as an ATSEP when he/she fulfils three conditions: he/she must be authorised, competent, and operate on safety related systems. Guidance on those

- three elements is given in GM in order to understand the function of ATSEP. This paragraph also specifically excludes some operational related tasks from the scope.
- 246. **ATSEP.OR.010** 'Identification of safety-related systems'. For years, the term 'safety related tasks' has been subject to many different interpretations and it is still not clear what this term exactly covers today. To avoid further misinterpretation and confusion, it is proposed not to use this term in the context of 'personnel undertaking operational safety related task' but to link it to the system and equipment through the management systems.
- 247. **ATSEP.OR.015** 'Training and competence assessment programme'. This paragraph requires service providers to establish a training programme as well as an assessment programme. Both programmes are of particular importance as they contain the necessary elements that service providers need to foresee to ensure that ATSEP are properly trained and assessed. Only a general objective is laid down in the requirement. The associated GM is intended to help ATM/ANS service providers to elaborate their programmes.
- 248. **ATSEP.OR.020** 'Language proficiency'. This paragraph provides a very general requirement on service providers to ensure that ATSEP are proficient in the language required to perform their duties. Very different situations and experiences exist in European Member States regarding the language to be used. In certain regions of Europe, ATSEP communicate or receive documents in a language other than their own and are required to understand. In other regions, specific tasks of ATSEP, for example at remote aerodromes, do not require ATSEP to be proficient in any language other than their own. It is, therefore, proposed to keep the language requirement to a minimum but at the same time general enough to ensure that language issues would not affect safety. Furthermore, cross border communication issues that could arise in the context of the FAB are also taken into account in the rule proposal.
- 249. **ATSEP.OR.100** 'Training requirements'. This paragraph lists the three phases of training that ATSEP need to undergo before being operational. Additionally, service providers shall ensure that ATSEP complete continuation training during their career.
- 250. **ATSEP.OR.105** 'Basic Training'. The Basic training contains the mandatory elements to be included in the syllabi. The subjects, topics and sub-topics of the ATSEP CCC (Annex I Basic syllabus) have been reproduced in the IRs for Basic training. As explained in paragraph 139 above, this requirement contains mandatory elements for all ATM/ANS providers and other elements that are mandatory only if decided by the ATM/ANS provider taking into account its operational needs.
- 251. **ATSEP.OR.110** 'Qualification Training'. The Qualification training contains the mandatory elements to be included in the syllabi. This requirement contains the 'Shared' that is mandatory and, at least, one mandatory stream, the others depending on the category of streams ATSEP will work on. This IR contains 17 AMCs corresponding to the 16 streams and the shared qualification training.
- 252. **ATSEP.OR.115** 'S/E rating Training'. This requirement establishes the elements of training for ATSEP who must have training oriented to the equipment and its environment. To provide effective training on systems and equipment, service providers are required to include in their training programme, theoretical and practical aspects and on-the-job training. In addition, ATSEP need to acquire knowledge and skills pertaining to the functionality of the S/E. This requirement is applicable to a new ATSEP, an already rated one, or a rated ATSEP willing to achieve additional competences in a same stream due to relocation or a system upgrade. In order to avoid any confusion in the proposed rules, the term 'rating' is

- always associated to the system/equipment training and is not to be understood in the same way as the rating mechanism that exists in the licensing scheme.
- 253. **ATSEP.OR.120** 'Continuation Training' . The objective of this requirement is to ensure that ATSEP have up-to-date operational knowledge and experience in all required topics. Such training should contribute to the ongoing development and maintenance of ATSEP skills and to improve the services provided. The refresher training, the emergency training, and the S/E upgrades and modifications training are specified in the associated GM.
- 254. **ATSEP.OR.125** 'Competence assessment requirements General'. This requirement obliges ATM/ANS service providers to ensure that ATSEP will be assessed before performing duties. In line with ICAO Training Manual on ATSEP, the Agency proposes two kinds of competence assessment. An initial competence assessment, before ATSEP are allowed to perform duties, and an ongoing competence assessment in order to ensure that ATSEP maintain their competence.
- 255. ATSEP.OR.130 'Assessment of initial and ongoing competence'. The level of requirement is very general and introduces those two elements without any further details. The way the assessment is conducted is left to the ATM/ANS provider. However, they need to assess the competence against a number of criteria defined in the requirements. The requirements on competence assessment are supported by a number of GMs to understand the concept of initial and ongoing competence assessment.
- 256. **ATSEP.OR.135** 'Training instructors'. This requirement provides a general obligation on ATM/ANS providers to ensure that instructors are suitably experienced. It is up to the service provider to decide if its instructors need to be sent on an instructor skills training course or not. As the ATSEP environment is a very technical and specialised one, it is usual to have instructors who come directly from the ATSEP environment. In practice, ATSEP are trained to become instructors.
- 257. **ATSEP.OR.140** 'Technical skills assessors'. Technical skills assessors need to be suitably experienced. They should possess specific technical skills to perform such an assessment, e.g. precise analytical and evaluation skills and interpersonal and communication skills. As for the instructors, the rules do not impose a specific training. It is up to the service provider to assess who is suitably experienced to perform such duties. An associated AMC is provided to specify when a technical skills assessor is suitable to perform an assessment. Also, GM is provided to define a technical skills assessor.

V. Summary of the RIA

Background

Following the adoption of Commission Implementing Regulations (EU) No 1034/2011 and No 1035/2011 representing the so-called 'first phase' of the implementation of the Agency's remit to ATM/ANS, a number of regulatory gaps have been identified that still need to be addressed in the second phase. These 'gaps' include technical, editorial, and legal questions, most of which are not expected to have a major impact on stakeholders (see Explanatory Note). The RIA report only deals with significant issues.

EASA Opinion No 02/2010 already indicated that the relevant Agency's rulemaking tasks will further elaborate on these Commission Implementing Regulations. This NPA is now dealing with the following steps by providing additional provisions to implement the Basic Regulation and to support the standardisation of the ATM/ANS field in EASA countries.

Scope of the draft rule

- Requirements for competent authorities in ATM/ANS;
- Extension of the common requirements to cover all ATM/ANS providers;
- Requirements for the declaration of flight information services providers; and
- Requirements for Air Traffic Safety Electronics Personnel (ATSEP).

Issues

The main issue is that as long as the additional draft provisions (that are included in this NPA and that will be complemented in subsequent NPAs are not enforced, the Basic Regulation and its Essential Requirements cannot be properly implemented, leaving room for national requirements to continue without the necessary harmonisation foreseen by the EU Member States with the extension of the Basic Regulation. The implementation issues will depend on the current national requirements applicable in each Member State. However, they can be treated on a general basis and, therefore, they can be grouped as following:

- Issues related to Authority Requirements (AR)
 - Chapter 4 Towards a management system of the Competent Authorities and National Supervisory Authorities (CAs/NSAs) (Authority Requirements (AR));
 - Chapter 5 Introduction of the findings classification (AR);
 - Chapter 6 Towards performance-based oversight (AR);
- Issues related to Organisation Requirements (OR)/Requirements for ATM/ANS providers
 - Chapter 7 Requirements for ATM/ANS providers;
 - Chapter 8 Declaration of flight information services providers; and
- Issues related to Personnel
 - Chapter 9 Air Traffic Safety Electronics Personnel (ATSEP).

Authority requirements

For the sake of air transport safety, the Agency already committed to align the SMS and SSP related requirements with ICAO elements in the area of ATM/ANS as part of the EASp. Failure to implement a correct alignment would be prejudicial for this commitment.

Some of the requirements for the implementation of SSP have already been applicable since 2007 with Commission Regulation (EC) No 1315/2007, transposed later to Commission Implementing Regulation (EU) No 1034/2011. The implementation of these requirements, however, is not homogeneous among the EASA Member States. EASA Standardisation visits identified that the CAs/NSAs do not interpret in the same way the requirements when auditing the ATM/ANS providers. The origin of the different interpretations at national level can be attributed for the major part to the lack of detailed common EU requirements.

Towards a total system approach, the competent authorities in the other aviation domains have already been required to upgrade their systems and procedures to the new

authority requirements introduced with the latest Commission Regulations in the field of aviation safety. If this does not apply to the ATM/ANS domain, the goal towards implementation of the SSP and towards a total system approach will be not achieved.

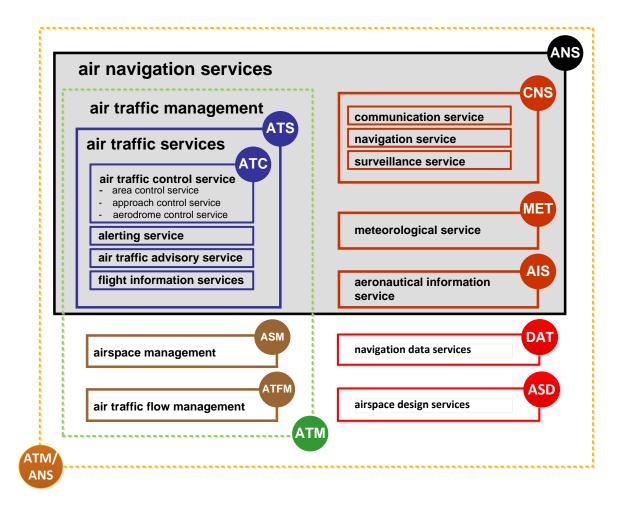
Three main areas requesting clarification on interpretation have been identified that would need to be evaluated in order to assess the impact to the competent authorities. They can be summarised as following:

- establishment of the management system by the competent authorities,
- introduction of classification scheme of the non-compliances/findings raised by the competent authorities; and
- moving towards 'performance-based' and 'risk-based' oversight.

Requirements for ATM/ANS providers

Commission Implementing Regulation (EU) No 1035/2011 applies only to Air Navigation Service Providers (ANSP) (which includes Air Traffic Services providers (ATS providers), meteorological services providers (MET providers), Aeronautical Information Services providers (AIS providers) and Communication, Navigation, Surveillance services providers (CNS providers)). However, it does not apply to:

- Air Traffic Flow Management (ATFM) providers;
- Airspace Management (ASM) providers;
- Airspace Design (ASD) providers;
- data (DAT) providers; and
- the Network Manager.



Currently, there are not harmonised criteria for the provision of ATM/ANS and for the competent authority to certify and further oversee all these ATM/ANS providers as foreseen by the Basic Regulation.

Based on the above, it can be concluded that the scope of the impacts analysed in this RIA relates mainly to these four providers: ATFM, ASM, ASD, and DAT, and to a certain extent to the Network Manager.

Another driver of the issues is the high level of technical complexity that is constantly induced by the implementation of new technologies (e.g. those foreseen by SESAR programme). If there is not a proper regulatory framework for the providers so that they have a strong basis to support implementation, it may induce an increase in safety risks. These programmes are usually implemented to increase capacity and efficiency in the ATM/ANS field.

Requirements for the declaration of flight information services providers

Commission Implementing Regulation (EU) No 1035/2011 already considers that more flexibility is needed for certain ANSP and allows a system in which they will be certified but subject to derogations from some requirements which are already regarded as too burdensome for these providers. The certificates subject to derogation from the requirements are only valid within the airspace falling under the responsibility of the Member State. Part of these providers are FIS providers and even additional derogations are foreseen for FIS providers which operate regularly not more than one working position at any aerodrome.

Article 8b(3) foresees the possibility for Member States to implement a declaration scheme for FIS providers and leaves the criteria and conditions for such scheme to be determined at Implementing Rules level. This NPA aims at achieving this objective and provides conditions for the Member States to have the possibility to implement a declaration scheme for FIS providers in the most appropriate way.

ATSEP (Air Traffic Safety Electronics Personnel)

The Basic Regulation lays down the basis for a mandatory implementation of training and competence assessment for all ATM/ANS personnel , including ATSEP. Service providers are obliged to properly train and assess their ATSEP to ensure current and ongoing competence.

Although it is recognised that the level of competence of ATSEP in Europe is currently acceptable, it is fair to question if this situation can be maintained in the future taking into account the air traffic growth, the consequences of increase of technology complexity, and the impact of the possible need for higher staff mobility in order to adjust to the job offer or demand where there is important growth of traffic.

The following main issues have been identified:

- Issues with the implementation of the current regulatory framework: no precise requirement to ensure that adequate training and efficient competence assessment will be provided;
- Training issues: the ATSEP Common Core Content (CCC) Initial Training (ATSEP CCC) is not uniformly applied throughout the EASA Member States, if at all; and
- Competence assessment issues: There are currently no requirements in the EU regulation framework. As a consequence, the implementation of Annex Vb to the Basic Regulation cannot be fulfilled and the oversight cannot be established on a common basis.

Who is affected?

- CAs/NSAs, including the Agency.
- The ATM/ANS providers, and more specifically the six types of providers ATFM, ASM, ASD, DAT, NM and FIS providers.
- Staff working as ATSEP.

Baseline scenario

Without addressing properly the issues identified, the requirements in the Basic Regulation for ATM/ANS (mainly article 8b) and the Essential Requirements in Annex Vb (mainly chapter 5) cannot be implemented. Taking into account the increase of technological complexity and the potential traffic increase forecasted by EUROCONTROL³⁹, this may raise concerns on overall aviation safety level.

Objectives

Although the current situation in the EU Member States does not show significant safety risk, the overall analysis is that the continuous increase in technology complexity and

³⁹ The reference to this document can be found in point 2 of Appendix C to the RIA.

growth of aviation transport request measures to meet the Basic Regulation's general objectives:

- to maintain a high uniform level of civil aviation safety; and
- to provide level playing field with proportionate and cost-efficient rules.

Therefore, these objectives are relevant to all issues. Cost-efficiency includes ensuring a smooth transition from national to common European requirements.

Further detailed specific objectives are generally different for each issue.

Options

Option 0 'Do nothing' is assessed for all the issues to indicate the development of the baseline scenario if the regulatory framework would remain as it is today. For each issue, the other options are (**preferred option indicated in bold**):

Chapter 4 — Towards a management system of the CAs/NSAs (Authority Requirements)

Option 1: Establishment of the management system by the competent authority

New processes and tasks for the competent authorities, in particular the implementation of a compliance monitoring system, including an internal audit process and safety risk management process.

In addition to that, the competent authorities shall appoint one or more persons with the overall responsibility for the management of the relevant task(s).

<u>Chapter 5 — Introduction of the findings classification (Authority Requirements)</u>

Option 1: Implementation of the findings classification

It provides for a convenient and straightforward system between findings and corrective actions and has been tailored to the oversight of ATM/ANS providers while ensuring the continuity of service.

Chapter 6 — Flexible risk-based approach only for a period of two years

Option 1: Rulemaking group proposal ATM/ANS.AR.C015

The possibility in the draft rule ATM/ANS.AR.C015 (c)(5) to 'sample each organisation (...) in a manner commensurate with the level of risk posed (...)' provides for unambiguous flexibility compared to Option 0. This possibility ensures that NSAs/CAs are able to base their oversight programme on a risk assessment. However, Option 1 limits the flexible risk-based approach only for a period of two years.

Option 2: Option 1 with extended flexibility of performance-based oversight

The flexibility of performance-based oversight in Option 1 is extended with Option 2. In particular, subparagraph (5) of ATM/ANS.AR.C.015 (c) reads: 'a maximum of 4 years oversight planning can be implemented under certain conditions, instead of 2 years with Option 1. The oversight in a performance-based environment (Performance-Based Oversight (PBO)) is a new approach for the competent authorities to discharge their responsibilities as it considers the criteria of the ATM/ANS providers' safety management implementation indicated in paragraphs (i) to (iv) in a controlled process'.

<u>Chapter 7 - Requirements for ATM/ANS providers</u>

Option 1: Extend the scope of Annex I to Commission Implementing Regulation (EU) No 1035/2011 by including all ATM/ANS providers without changing it.

This option does not represent a significant change to the ANSPs already certified, however, further amendments may be needed later on in time. AMC/GM and new annexes to cover the provisions of the four new services would be needed with this option.

The application of some requirements in Annex I to Commission Implementing Regulation (EU) No 1035/2011 may not be proportionate or relevant to the new types of providers (e.g. financial strength).

Option 2: Amend Commission Implementing Regulation (EU) No 1035/2011 and extend it to make it applicable to all ATM/ANS providers.

Amend Annex I to make it applicable to all ATM/ANS providers and implement the Essential Requirements in Chapter 5 of Annex Vb to the Basic Regulation. With this option, AMC and GM are established when necessary. Specific annexes are set up for each type of ATM/ANS service provision.

<u>Chapter 8 - Requirements for the declaration of flight information services (FIS) providers</u>

Option 1: Apply the same criteria that exist for FIS providers eligible to derogations, and, in addition, define a new set of criteria for FIS providers to be eligible to declare their activities.

Article 6 of the Cover Regulation of the new proposed regulation applies the same criteria than the ones applicable to FIS providers which are eligible for derogations. <u>Chapter 9 — Air Traffic Safety Electronic Personnel</u>

Option 1: Introduce training and competence assessment and transpose the ATSEP CCC in the Implementing Rules.

Option 2: Introduce training and competence assessment and transpose the ATSEP CCC in Acceptable Means of Compliance (AMC).

Option 3: Introduce training and competence assessment and transpose the ATSEP CCC in the Implementing Rules and in AMC.

Conclusions

Summary of the main impacts

The draft rules will have a positive impact on safety and regulatory harmonisation aspects, including social aspects for ATSEP. They will require adaptation from stakeholders, which will create additional activities during a certain period of time. To allow for sufficient time to prepare for the necessary changes and to keep the potential burden induced by these changes to a minimum, an 18 months' adaptation and transition period is envisaged for the CAs/NSAs and a 24 months' adaptation and transition period is envisaged for ATM/ANS providers. Further details on the proposed adaptation and transition period can be found in paragraph 74 of the Explanatory note. Once implemented, the new rules will support cost-efficient ATM/ANS provision requirements, and will contribute to the overall efficiency of air navigation in Europe as well.

By meeting the objectives set in the RIA Chapter 3 and in the detailed Chapters 4 to 9, the overall impact is considered to be beneficial for the provision of ATM/ANS.

Summary of the impact on stakeholders

- CAs/NSAs, including the Agency will benefit from:
 - the easier implementation of the SSP;
 - the harmonised oversight requirements for all providers of ATM/ANS;
 - the common approach for findings classification;
 - reducing the administrative effort and time currently attributed to regulatory coordination and harmonisation with ICAO (the Agency ensuring mainly this role); and
 - the synergies of these rules with other aviation domains towards 'total system approach'

Overall, the above will enhance safety, oversight, and cost-efficiency over time.

- ATM/ANS providers, and more specifically these four types of providers (ATFM, ASM, ASD, and DAT) as well as FIS providers will benefit from:
 - the one clear set of requirements with the necessary flexibility via AMC and GM;
 - the clarifications improving also the legal certainty; and
 - the harmonised set of requirements for the providers of ATM/ANS plus synergies with relevant requirements applicable in order aviation domains.

Overall, the above will enhance safety, level playing field, and cost-efficiency.

- ATSEP will benefit from:
 - the common requirements at EU level on training and competence assessment; and
 - the necessary flexibility given to ATM/ANS providers to adapt their initial training to their needs.

Overall, the above will ensure safety, mobility, and cost-efficiency.

- The Agency will benefit from a single set of common rules:
 - that facilitates the task of assisting Member States to fulfil their obligations under the Chicago Convention, and that provides a basis for a common interpretation and uniform implementation of the requirements; and
 - that promotes cost-efficiency in the regulatory processes and aims at avoiding duplication at national and EU level.
- Across stakeholders

The 18 months' period of transitional arrangements for CAs/NSAs and the 24-months' period for the transitional arrangements for the ATM/ANS providers to allow them to take the necessary actions, including the certification actions, etc., are deemed to be sufficient to ensure a smooth transition for the stakeholders to comply with the new elements.

Open issues

The remaining open issues from the Explanatory Note will be dealt with following the receipt of the stakeholders' input during the public consultation period.

Additionally, stakeholders are kindly invited to provide data on administrative cost impacts introduced by these draft rules and any other quantitative information they may find necessary to bring to the attention of the Agency.

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

VI. How to comment on this NPA

- 258. Comments on this NPA may be submitted to the Agency within 3 months as of the date of publication in accordance with Article 6(4) of the Rulemaking Procedure.
- 259. Please submit your comments using the **automated Comment-Response Tool** (CRT) available at http://hub.easa.europa.eu/crt/.40
- 260. The deadline for the submission of comments is 12 August 2013.

In case the use of the Comment-Response Tool is prevented by technical problems, please report them to the CRT webmaster (crt@easa.europa.eu).

B. Proposed rule

I. Draft Opinion amending Commission Implementing Regulation (EU) No 1034/2011 and Commission Implementing Regulation (EU) No 1035/2011

Refer to draft Implementing Regulation in NPA 2013-xx (B).

II. Draft Acceptable Means of Compliance and Guidance Material (draft EASA Decision)

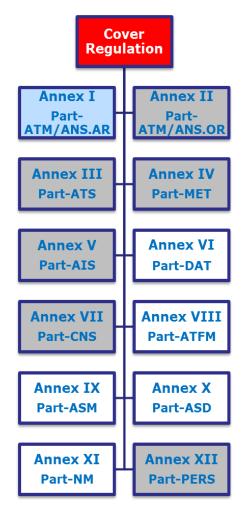
Refer to draft AMC and GM in NPA 2013-xx (C).

C. Regulatory Impact Assessment

Refer to RIA in NPA 2013-xx (D).

D. Appendices

I. RULE STRUCTURE AND ITS FUTURE EVOLUTION



- **Cover Regulation**: Scope, Definitions, transition period, etc.
- **▶ Annex I**: Requirements for Authorities
- ➤ Annex II: Requirements for organisations General
- ➤ Annex III: Requirements for Air Traffic Services
- ➤ Annex IV: Requirements for Meteorological Services
- ➤ Annex V: Requirements for Aeronautical Information Services
- ➤ Annex VI: Requirements for Data Providers
- ➤ Annex VII: Requirements for Communication, Navigation & Surveillance
- ➤ Annex VIII: Requirements for Air Traffic Flow Management
- ➤ Annex IX: Requirements for Air Space Management
- ➤ Annex X: Requirements for Air Space Design
- ➤ Annex XI: Requirements for Network Management

Based on
Commission
Implementing
Regulation (EU)
No 1035/2011
Based on
Commission
Implementing
Regulation (EU)
No 1034/2011
New, based on the
Basic Regulation

>

Table showing the NPA structure and the future amendments (1)

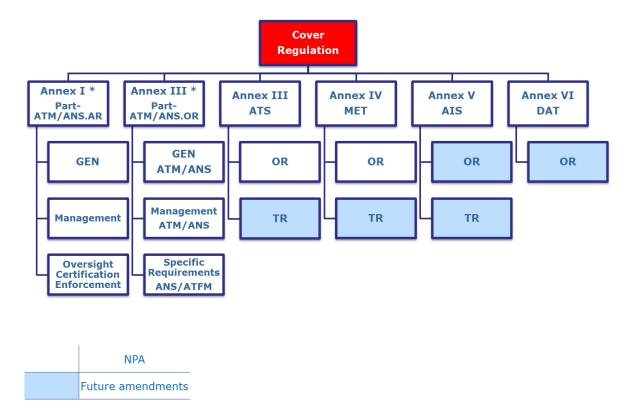
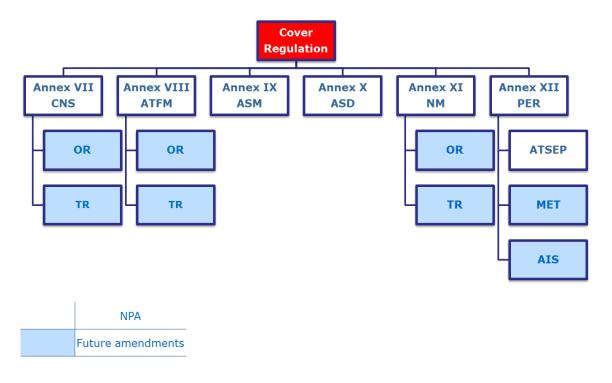


Table showing the NPA structure and the future amendments (continued)



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II. CROSS REFERENCE TABLE 1 — Commission Implementing Regulations (EU) No 1034/2011 and (EU) No 1035/2011 and Commission Regulation (EU) No 677/2011, Annex VI to the proposed requirements in this NPA

CROSS REFERENCE TABLE of Commission Implementing Regulation (EU) No 1034/2011 to Cover Regulation and Part – ATM/ANS.AR

	Cross Reference Table of Commission Implementing Regulation (EU) No 1034/2011 to			
	Г	Cover Regula	ation and Part – ATM/ANS.AR	
Commission Implementing Regulation (EU) No 1034/2011 Reference	Subject	EASA Reference	Reason/Justification	
Article 1	Subject matter and scope	Article 1	Combination and alignment into one article to reflect the subject matter and scope of the draft Implementing Rule.	
Article 2	Definitions	Article 2	The definitions are amended as explained in paragraphs 59-68 of Chapter 2 of the EN.	
Article 3	Competent authorities for oversight	Article 3	It was modified to take into account the merging of the two regulations and the requirements for the Member States with regard to the competent authorities.	
Article 4	Safety oversight function	Article 3(4) ATM/ANS.AR.A.005	The main part remains unchanged; however, it has been modified in order to distinct the responsibility of the Member States and of the competent authorities when concluding an agreement on the supervision of ATM/ANS providers active in FAB or in cross-border activities.	
Article 5	Monitoring of safety performance	ATM/ANS.AR.C.005	Text remains unchanged, just editorial changes.	
Article 6	Verification of compliance with safety regulatory requirements	ATM/ANS.AR.C.010	Transferred with a number of modifications to make it fit within the new structure and to implement the Basic Regulation, as explained in paragraph 90 of the EN.	

Cross Reference Table of Commission Implementing Regulation (EU) No 1034/2011 to Cover Regulation and Part – ATM/ANS.AR

Cover Regulation and Part - Arm/ANS.AR			
Commission Implementing Regulation (EU) No 1034/2011 Reference	Subject	EASA Reference	Reason/Justification
Article 7	Safety regulatory audits	ATM/ANS.AR.C.015	Transferred with a number of modifications to make it fit within the new structure and to merge it with Article 7 of Commission Implementing Regulation (EU) No 1035/2011, as explained in paragraph 91 of the EN.
Article 8	Corrective actions	ATM/ANS.AR.C.025	The whole article has been replaced by a new provision on 'Findings, corrective actions, and enforcement measures' in order to implement the Basic Regulation and to introduce the classification of findings. Please refer to paragraphs 99-102 of Chapter 4 of the EN.
Article 9	Safety oversight of changes to functional systems N/A	ATM/ANS.AR.C.030	Result of the rulemaking tasks RMT.0469 and RMT.0470 as explained in the EN.
Article 10	Review procedure of the proposed changes	ATM/ANS.AR.C.035	Result of the rulemaking tasks RMT.0469 and RMT.0470 as explained in the EN.
Article 11	Qualified entities	ATM/ANS.AR.B.010 AMC1 ATM/ANS.AR.B.010	The framework of the current provision has been retained; however, the requirements have been modified in order to bring the provision aligned with the Basic Regulation. The more elaborated requirements in existing provision have been placed into to the related AMC.
Article 12	Safety Oversight capabilities	Article 5	The framework has been retained with an amendment in order to address the capability of the competent authority responsible for the oversight on the Network Manager. Furthermore, the second part of paragraph 3, has been transferred to the AMCs.
Article 13	Safety directives	ATM/ANS.AR.A.020	Unchanged provision, except that the safety directive is not required to be provided to the Commission any more.
Article 14	Safety oversight	ATM/ANS.AR.B.020	The provision was further elaborated and detailed in order to guarantee proper storage, accessibility, and traceability of the whole scope of competent authorities' activities.

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Cross Reference Table of Commission Implementing Regulation (EU) No 1034/2011 to Cover Regulation and Part – ATM/ANS.AR

Commission Implementing Regulation (EU) No 1034/2011 Reference	Subject	EASA Reference	Reason/Justification
	records		
Article 15	Safety oversight reporting	ATM/ANS.AR.A.025	The provision proposes the competent authorities not to produce a separate annual safety oversight report any more as required so far, but instead, to continue to contribute to the annual reports of the Member States as laid down in Article 12 of the framework Regulation.
Article 16	Information exchange between competent authorities	ATM/ANS.AR.B.005 (c)	Part of the management system.
Article 17	Transitional provisions	Article 9	N/A
Article 18	Repeal	Article 10	N/A
Article 19	Amendment to Commission Regulation (EU) No 691/2010		N/A
Article 20	Entry into force	Article 11	N/A

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CROSS REFERENCE TABLE of Commission Implementing Regulation (EU) No 1035/2011to Cover Regulation and Parts – ATM/ANS.AR and ATM/ANS.OR, ATS, MET, AIS and CNS

Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
Article 1	Subject matter and scope	Article 1	Combination and alignment into one article to reflect the subject matter and scope of the draft Implementing rule
Article 2	Definitions	Article 2	The definitions are amended as explained in paragraphs 59 - 68 of Chapter 2 of the EN
Article 3	Competent authority for certification	Article 3	It was modified to take into account the merging of the two regulations and the requirements for the Member States with regard to the competent authorities.
Article 4	Granting of certificates	ATM/ANS.OR.A.010 ATM/ANS.AR.C.010 (a)(1)	The acts and responsibilities of the ATM/ANS providers and the competent authorities have been split in the relevant Parts.
Article 5	Derogations	ATM/ANS.OR.A.015	The provision on 'Application for a limited certificate' replaces the article on derogations. The proposed provision keeps the essence of today's Regulation on derogations; however, it is more aligned with the scheme foreseen under the Basic Regulation.
Article 6	Demonstration of compliance	ATM/ANS.OR.A.030 ATM/ANS.OR.A.035 ATM/ANS.AR.C.025 (e)	The Article has been divided into its two different Parts, respectively ATM/ANS.AR and ATM/ANS.OR. The interaction in handling of 'Findings, corrective actions and enforcement measures' between the competent authority and the ATM/ANS provider has been established.
Article 7	Facilitation of compliance monitoring	ATM/ANS.OR.A.045 Article 5	The framework remains unchanged with some amendments in order to implement the Basic Regulation.

Cover Regulation and Parts - ATM/ANS.AR and ATM/ANS.OR, ATS, MET, ATS and CNS			
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
Article 8	Ongoing compliance	ATM/ANS.AR.C.015	The article has been merged with Article 7 of Commission Implementing Regulation (EU) No 1034/2011 as the mentioned provisions require the same by the competent authorities.
Article 9	Safety regulation of engineering and technical personnel	Annex XII (Part – ATSEP) ATM/ANS.AR.C.015 (c) ATM/ANS.AR.C.025 ATM/ANS.AR.C.010	Please refer to paragraph 46 of Chapter 1 of the EN
Article 10	Peer review procedure		N/A
Article 11	Transitional provisions	Article 9	N/A
Article 12	Repeal	Article 10	N/A
Article 13	Amendment to Commission Regulation (EC) No 482/2008		N/A
Article 14	Amendment to Regulation (EU) No 691/2010		N/A
Article 15	Entry into force	Article 11	N/A
ANNEX I	General requirements for the provision of air navigation services	Annex II (Part-ATM/ANS.OR)	N/A

	- COVER REG	Thirties Arrive	ANS.AR and ATPI/ANS.OR, ATS, MET, ATS and CNS
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
1.	Technical and operational competence and capability	ATM/ANS.OR.B.005	The provision remains unchanged.
2.	Organisational structure and management	SUBPART B (ATM/ANS.OR.B)	N/A
2.1.	Organisational structure	ATM/ANS.OR.B.010	The provision remains unchanged.
2.2.	Organisational management	ATM/ANS.OR.C.010	The provision remains unchanged.
2.2.1.	Business plan	ATM/ANS.OR.C.010 (a)	The provision remains unchanged.
2.2.2.	Annual plan	ATM/ANS.OR.C.010 (b)	The provision remains unchanged.
2.2.3.	Performance part of the plans	ATM/ANS.OR.C.010 (c)	The provision remains unchanged.
3.	Safety and quality management	ATM/ANS.OR.B.015 ATM/ANS.OR.B.040	It is integrated in more comprehensive management system requirements. For more details, please refer to paragraph 125 of the EN.
3.1.	Safety management	ATM/ANS.OR.B.015	Please refer to paragraph 125 of the EN.
3.2.	Quality management	ATM/ANS.OR.B.015	Please refer to paragraph 125 of the EN.
3.3	Operations manuals	ATM/ANS.OR.B.040	The provision is retained with minor amendments.
4.	Security	ATM/ANS.OR.C.015	The provision is retained without changes.

	Cover Regulation and Parts - ATM/ANS.AR and ATM/ANS.OR, ATS, MET, ATS and CNS				
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification		
5.	Human resources	ATM/ANS.OR.B.025	The provision is retained without changes.		
6.	Financial strength	ATM/ANS.OR.C.020	The provision is retained with minor amendments.		
6.1.	Economic and financial capacity	ATM/ANS.OR.C.020	The provision is retained without changes.		
6.2.	Financial audit		The provision is already covered in Regulation (EC) No 550/2004.		
7.	Liability and insurance cover	ATM/ANS.OR.C.025	The provision is retained without changes		
8.	Quality of services		N/A		
8.1.	Open and transparent provision of air navigation services	ATM/ANS.OR.C.030	The provision is retained without changes.		
8.2.	Contingency plans	ATM/ANS.OR.C.035	The provision is retained without changes.		
9.	Reporting requirements	ATM/ANS.OR.C.040	The provision is retained without changes.		
ANNEX II	Specific requirements for the provision of air traffic services	Annex III (Part-ATS)			

	Cover Regulation and Parts - ATM/ANS.AR and ATM/ANS.OR, ATS, MET, ATS and CNS			
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification	
1.	Ownership	ATS.OR.110	The provision is retained without changes.	
2.	Open and transparent provision of services	ATS.OR.115	The provision is retained without changes.	
3.	Safety of services	Section 2	N/A	
3.1.	Safety management system (SMS)	ATS.OR.205	The requirements have been rearranged to align with ICAO SMS framework structure.	
3.1.1.	General safety requirements Providers of air traffic services shall, as an integral part of the management of their services, have in place a safety management system (SMS) which:	ATS.OR.205 (a)	The requirements have been rearranged to align with ICAO SMS framework structure.	
(a)	(1) ensures a formalised, explicit and		The requirements have been rearranged to align with ICAO SMS framework structure.	

	Cover Regulation and Parts – AIM/ANS.AR and AIM/ANS.OR, AIS, MEI, AIS and CNS				
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification		
	proactive approach to systematic safety management in meeting their safety responsibilities within the provision of their services;				
	(2) operates in respect of all their services and the supporting arrangements under its managerial control; and				
	(3) includes, as its foundation, a statement of safety policy defining the organisation's fundamental approach to managing safety (safety management);				

	Cover Regulation and Parts – AIM/ANS.AR and AIM/ANS.OR, AIS, MEI, AIS and CNS				
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification		
	ensures				
	(1) that everyone involved in the safety aspects of the provision of air traffic services has an individual safety responsibility for their own actions;				
(b)	(2) that managers are responsible for the safety performance of their respective departments or divisions and that the top management of the provider carries an overall safety responsibility (safety responsibility);		The requirements have been rearranged to align with ICAO SMS framework structure.		

	Cover Regulation and Parts - ATM/ANS.AR and ATM/ANS.OR, ATS, MET, ATS and CNS			
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification	
(c)	ensures that the achievement of satisfactory safety in air traffic services shall be afforded the highest priority (safety priority); and		The requirements have been rearranged to align with ICAO SMS framework structure.	
(d)	ensures that while providing air traffic services, the principal safety objective is to minimise its contribution to the risk of an aircraft accident as far as reasonably practicable (safety objective).		The requirements have been rearranged to align with ICAO SMS framework structure.	
3.1.2.	Requirements for safety achievement Within the operation of the SMS, providers	ATS.OR.205	The requirements have been rearranged to align with ICAO SMS framework structure.	

Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
	of air traffic services shall:		
(a)	ensure that personnel are adequately trained and competent for the job they are required to do, in addition to being properly licensed if so required and satisfying applicable medical fitness requirements (competency);		The requirements have been rearranged to align with ICAO SMS framework structure.
(b)	ensure that a safety management function is identified with organisational responsibility for development and maintenance of the SMS; ensure that this point of responsibility is independent of line		The requirements have been rearranged to align with ICAO SMS framework structure.

Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
кетегепсе	management, and accountable directly to the highest organisational level. However, in the case of small organisations where a combination of responsibilities may prevent sufficient independence in this regard, the arrangements for safety assurance shall be supplemented by additional independent means; and ensure that the top management of the service provider organisation is		
	actively involved in ensuring safety management (safety		

Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
	management responsibility);		
(c)	ensure that, wherever practicable, quantitative safety levels are derived and are maintained for all functional systems (quantitative safety levels);		The requirements have been rearranged to align with ICAO SMS framework structure.
(d)	ensure that the SMS is systematically documented in a manner which provides a clear linkage to the organisation's safety policy (SMS documentation);		The requirements have been rearranged to align with ICAO SMS framework structure.
(e)	ensure adequate justification of the safety of the externally provided services and supplies, having regard to	ATM/ANS.OR.DB.020	The requirement about contracted activities already covers this requirement.

Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
	their safety significance within the provision of its services (external services and supplies);		
(f)	ensure that risk assessment and mitigation is conducted to an appropriate level to ensure that due consideration is given to all aspects of the provision of ATM (risk assessment and mitigation). As far as changes to the ATM functional system are concerned, point 3.2 shall apply;		The requirements have been rearranged to align with ICAO SMS framework structure.
(g)	ensure that ATM operational or technical occurrences		The requirements have been rearranged to align with ICAO SMS framework structure.

	Cover Regulation and Parts - ATM/ANS.AR and ATM/ANS.OR, ATS, MET, ATS and CNS			
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification	
	which are considered to have significant safety implications are investigated immediately, and any necessary corrective action is taken (safety occurrences). They shall also demonstrate that they have implemented the requirements on the reporting and assessment of safety occurrences in accordance with applicable national and Union law.			
3.1.3.	Requirements for safety assurance Within the operation of the SMS, providers of air traffic	ATS.OR.205	The requirements have been rearranged to align with ICAO SMS framework structure.	

		<u> </u>	The state of the s
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
	services shall ensure that:		
(a)	safety surveys are carried out as a matter of routine, to recommend improvements where needed, to provide assurance to managers of the safety of activities within their areas and to confirm compliance with the relevant parts of the SMS (safety surveys);		The requirements have been rearranged to align with ICAO SMS framework structure.
(b)	methods are in place to detect changes in functional systems or operations which may suggest any element is approaching a point at which acceptable		The requirements have been rearranged to align with ICAO SMS framework structure.

Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification
	standards of safety can no longer be met, and that corrective action is taken (safety monitoring);		
(c)	safety records are maintained throughout the SMS operation as a basis for providing safety assurance to all associated with, responsible for or dependent upon the services provided, and to the competent authority (safety records).		The requirements have been rearranged to align with ICAO SMS framework structure.
3.1.4.	Requirements for safety promotion Within the operation of the SMS, providers of air traffic services shall	ATS.OR.205	The requirements have been rearranged to align with ICAO SMS framework structure.

Cover Regulation and Parts - ATM/ANS.AR and ATM/ANS.OR, ATS, MET, ATS and CNS				
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification	
	ensure that:			
(a)	all personnel are aware of the potential safety hazards connected with their duties (safety awareness);		The requirements have been rearranged to align with ICAO SMS framework structure.	
(b)	the lessons arising from safety occurrence investigations and other safety activities are disseminated within the organisation at management and operational levels (lesson dissemination);		The requirements have been rearranged to align with ICAO SMS framework structure.	
(c)	all personnel are actively encouraged to propose solutions to identified hazards, and changes are		The requirements have been rearranged to align with ICAO SMS framework structure.	

	Cover Regulation and Parts - ATM/ANS.AR and ATM/ANS.OR, ATS, MET, ATS and CNS			
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification	
	made to improve safety where they appear needed (safety improvement).			
3.2.	Safety requirements for risk assessment and mitigation with regard to changes	ATS.OR.210	Reserved, awaiting for the result of the rulemaking tasks RMT.0469 and RMT.0470 as explained in the EN.	
3.3.	Safety requirements for engineering and technical personnel undertaking operational safety related tasks	Annex XII (Part-ATSEP) ATS.OR.225	The framework remains and the minor changes introduced aim at consistency with the changes introduced in Annex II and Annex XII.	
4.	Working methods and operating procedures	ATS.TR.105	Some minor technical updates and the introduction of the relevant provisions for ATS providers that provide services to flight test.	
ANNEX III	Specific requirements for the provision of meteorological services	Annex IV (Part-MET)	N/A	
1.	Technical and	SUBPART A (MET.OR)	This subpart A contains the requirements for MET providers and is divided	

	Cover Regulation and Parts - AIM/ANS.AR and AIM/ANS.OR, AIS, MEI, AIS and CNS			
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification	
	operational		into two sections:	
	competence and capability		 Section 1 on general obligations that are applicable to all MET providers; and 	
			 Section 2 on the requirements to be met by specific MET providers. 	
2.	Working methods and operating procedures	SUBPART B (MET.TR)	The provisions are retained with some minor technical updates.	
ANNEX IV	Specific requirements for the provision of aeronautical information services	Annex V (Part-AIS)	N/A	
1.	Technical and operational competence and capability	AIS.OR.110	The provision remains unchanged.	
2.	Working methods and operating procedures	AIS.TR.105	The provision remains unchanged.	
ANNEX V	Specific requirements for the provision of communication, navigation or	Annex VII (Part-CNS)	N/A	

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	Cover Regulation and Parts - ATHITANS.AR and ATHITANS.OR, ATS, PIET, ATS and CRS				
Commission Implementing Regulation (EU) No 1035/2011 Reference	Subject	EASA Reference	Reason/Justification		
	surveillance services				
1.	Technical and operational competence and capability	CNS.OR.105	The provision remains unchanged.		
2.	Safety of services	CNS.OR.110	The provision remains unchanged.		
3.	Working methods and operating procedures	CNS.TR.105	The provision remains unchanged.		

CROSS REFERENCE TABLE of Commission Regulation (EU) No 677/2011, Annex VI to

Parts -ATM/ANS.OR and NM

Cross-Reference Table of Commission Regulation (EU) No 677/2011, Annex VI to Parts -ATM/ANS.OR and NM Commission Regulation (EU) Subject **EASA Reference** Reason/Justification No 677/2011, Annex VI Reference GENERAL REQUIREMENTS Annex II ANNEX VI FOR NETWORK N/A (Part-ATM/ANS.OR) **FUNCTIONS** ORGANISATIONAL The framework remains unchanged. 1. ATM/ANS.OR.B.010 STRUCTURE It is integrated in more comprehensive management 2. SAFETY ATM/ANS.OR.B.015 system requirements. For more details, please refer to paragraph 125 of the EN.. 3. SECURITY ATM/ANS.OR.C.015 The framework remains unchanged. 4. The framework remains unchanged. **OPERATIONS MANUALS** ATM/ANS.OR.B.040 **PERSONNEL** 5. The framework remains unchanged. ATM/ANS.OR.B.025 **REQUIREMENTS** 6. The framework remains unchanged. CONTINGENCY PLANS ATM/ANS.OR.C.035 REPORTING 7. ATM/ANS.OR.C.040 The framework remains unchanged. REQUIREMENTS WORKING METHODS AND Annex XI (Part-NM), The provision has been retained with the relevant 8. OPERATING PROCEDURES NM.TR.105 references.

III. CROSS REFERENCE TABLE 2 – SSP components and elements to ATM/ANS draft rule (especially the requirements to the competent authorities)

	Cross Reference	Table of ICAO SSP elem	ents to Cover regulation and Part – ATM/ANS.AR
ICAO SSP components	ICAO SSP elements	EASA Reference to the new ATM/ANS proposal	Reason/Justification
	1.1 State safety legislative framework	N/A	Within the EU, Member States have transferred to the Union the power to legislate in the area of safety of ATM/ANS. In discharging this competence, the EU has developed a set of regulations applicable to all the Member States. This regulatory framework is described in paragraph 1.2 of the European Aviation Safety Programme (EASP) ⁴¹ .
1. State safety policy and objectives	1.2 State safety responsibilities and accountabilities	ATM/ANS.AR.B.005 ATM/ANS.AR.B.010 ATM/ANS.AR.B.015 ATM/ANS.AR.B.020	As explained above, the Member States have agreed to transfer competence to the EU, nonetheless, the implementation of EU law remains primarily the responsibility of the Member States. In the ATM/ANS domain, the certification and oversight tasks required by the Basic Regulation and its Implementing Rules are executed at national level and in certain cases, such as the provision of pan-EU and non-EU service provision, performed by the Agency in its role as a competent authority. In order for these obligations to be fulfilled by the Member States at high level, the Agency supports a holistic approach towards management systems as being a fundamental element of the set-up of an authority with allocation of responsibilities and accountabilities.
			Furthermore, it should be emphasised that the Member States still need to define who is going to maintain the SSP and how coordination among

EASP describes how aviation safety is managed at European Union level. It was prepared by the European Commission and the European Aviation Safety Agency. It will be amended by the European Commission from time to time to reflect any changes that occur within the European aviation safety system and can be found under http://eur-lex.europa.eu/LexUriServ.do?uri=SEC:2011:1261:FIN:EN:PDF.

	Cross Reference	Table of ICAO SSP elem	ents to Cover regulation and Part – ATM/ANS.AR
ICAO SSP components	ICAO SSP elements	EASA Reference to the new ATM/ANS proposal	Reason/Justification
		•	different entities playing a role in it is organised as it is part of their responsibilities under the Chicago Convention.
	1.3 Accident and incident investigation	N/A	Member States are responsible for the investigation of accidents and serious incidents in order to improve aviation safety by determining their causes and making safety recommendations intended to prevent recurrence. However, Regulation (EU) 996/2010 on the investigation and prevention of accidents and incidents in civil aviation reflects the institutional and regulatory framework governing civil aviation safety in the European Union, and, in particular, the establishment of the European Aviation Safety Agency (EASA).
	1.4 Enforcement policy	ATM/ANS.AR.C.025	The proposed provision sets up the framework for the establishment of conditions under which the ATM/ANS service providers are allowed to provide services, based on the safety risk posed by non-compliances, including concrete rules for possible suspension and revocation of certificates. However, the scope of the penalties for violation remains within the Member States' responsibilities. In cases where the Agency is acting as a competent authority, in accordance with the Community legal order such financial penalties are imposed by the Commission acting upon a recommendation of the Agency.
2. State safety risk management	2.1 Safety requirements for the service provider's SMS	Annex III (Part-ATS), Section 2 – Safety of service and especially ATS.OR.205 Safety	The proposed rule establishes the safety requirements for the ATS provider's SMS by defining the required SMS framework components and elements. The safety risk management component of the SMS will ensure that the ATS providers identify the hazard and manage the related risk. Please refer to Appendix IV CROSS REFERENCE TABLE – Proposed rules
	p	Management system	vs SMS framework.
	2.2 Agreement on the service provider's safety performance	N/A	Commission Regulation (EU) No 691/2010 sets up the performance scheme for air navigation services and network functions. The performance scheme aims at contributing to the sustainable development of the air transport system by improving overall efficiency of the air navigation services across the key performance areas of not only safety, but also environment, capacity, and cost-efficiency, all having regard to

Cross Reference Table of ICAO SSP elements to Cover regulation and Part – ATM/ANS.AR **EASA** Reference to **ICAO SSP ICAO SSP** the new ATM/ANS Reason/Justification elements components proposal the overriding safety objectives. The performance scheme Commission regulation sets up both indicators at European-wide level and indicators/targets at National or Functional Airspace Block (FAB) level, resulting from an agreement between the NSA and the Service Providers. The proposed provision on 'Management system' of the competent authority ensures the effective monitoring of the ICAO eight critical elements by applying a function to monitor compliance of the management system with the relevant requirements and the adequacy of ATM/ANS.AR.B.005 the procedures, including the establishment of an internal audit process 3.1 Safety oversight ATM/ANS.AR.C.010 and a safety risk management process. Furthermore, the proposed rules facilitate the establishment of a mechanism by the Member States to ATM/ANS.AR.C.015 ensure that the identification of the hazards and the management of the safety risk by the ATM/ANS providers follow established mechanisms. These mechanisms include certification, inspections, audits, and surveys. The European legislation, especially Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation ensures that occurrences in civil aviation are 3. State safety reported, collected, stored, protected, and disseminated. On the other assurance ATM/ANS.AR.A.010 hand, the Basic Regulation, as well as Commission Regulation (EC) 3.2 Safety data collection, analysis No 1330/2007, empower the Commission to disseminate safety ATM/ANS.AR.A.015 and exchange information 'to interested parties on its own initiative'. However, in order ATM/ANS.AR.A.020 to enhance the reporting practice, the provision requires the competent authorities to inform the Agency of issues relating to aviation safety as identified in EASP or areas specifically identified by the Agency as constituting a safety concern. 3.3 Safety-datadriven targeting of The proposed provision facilitates the establishment of a procedure oversight of areas of aiming at prioritising inspections, audits towards those areas of greater ATM/ANS.AR.C.015 greater concern or safety concern, or need as identified by the risk criteria set up. need 4. State safety 4.1 Internal training, Establishment of the minimum knowledge and experience requirements

ATM/ANS.AR.B.005

promotion

communication and

for technical personnel performing safety oversight functions.

	Cross Reference	Гable of ICAO SSP elem	ents to Cover regulation and Part – ATM/ANS.AR
ICAO SSP components	the new AIM/ANS		Reason/Justification
	dissemination of safety information	AMC1 ATM/ANS.AR.B.005 (a)(b) Training programme and recurrent training	
			Safety promotion tasks are shared between the EU, the Agency, and the Member States as outlined in the EASP. They are closely coupled with the Safety Assurance function through education and awareness promotion of safety risks and two-way communication of safety-relevant information to encourage an effective and efficient SMS.
	4.2 External training, communication and dissemination of safety information.	N/A	It is acknowledged that the element on external training and awareness provided by the Member States, respectively by the competent authorities to their service providers in all their aviation sectors is not established and implemented, therefore, several activities are ongoing in this respect.
			As an example, in the EASP it is clearly stated, moving towards a more performance-based system at EU level, new training capabilities need to be developed in order for all the personnel involved to ensure the effective and successful application of the new approach.

IV. CROSS REFERENCE TABLE 3 – SMS components and elements to ATM/ANS draft rule CROSS REFERENCE TABLE ICAO SMS elements to ATM/ANS draft rule,

Management System and Safety Management System

	Cross Reference Table of ICAO SMS to Part-ATM/ANS.OR									
ICAO SMS component	ICAO SMS elements	EASA Reference to the new ATM/ANS proposal	Reason/Justification							
	1.1 Management commitment and responsibility	Annex II, ATM/ANS.OR.B.015(a)(2) Annex III ATS.OR.205(a)(1)(i)	Management commitment and responsibility are defined in policy for all ATM/ANS providers. Safety policy is specific required for ATS and CNS providers. In addition, contribution to safety in general is addressed in the policy							
		AMC1 ATS.OR.205(a)(1)(i) Management system	all ATM/ANS providers.							
1. Safety policy and objectives	1.2 Safety accountabilities	Annex II, ATM/ANS.OR.B.015(a)(1) Annex II, ATM/ANS.OR.B.010 (b) Annex III ATS.OR.205(a)(1)(ii)	Safety accountabilities are defined generally for all ATM/ANS providers and more specifically for ATS and CNS providers.							
	1.3 Appointment of key safety personnel	Annex III ATS.OR.205(a)(2) AMC1 ATS.OR.205(a)(2) Management system COMPLEX PROVIDERS OF ATS - ORGANISATION AND	This provision is only required for ATS and CNS providers as the appointment of the, for instance, safety manager is a requirement only for SMS.							

	Cross Reference Table of ICAO SMS to Part-ATM/ANS.OR									
ICAO SMS component	ICAO SMS elements	EASA Reference to the new ATM/ANS proposal	Reason/Justification							
		ACCOUNTABILITIES								
	1.4 Coordination of emergency	Annex III ATS.OR.205(a)(3)	This provision is only required for ATS and CNS providers as							
	response planning	AMC1 ATS.OR.205(a)(3)	the appointment of the for ERP is a requirement only for SMS.							
		Annex II ATM/ANS.OR.B.015(b)								
	1.5 SMS documentation	AMC1 ATM/ANS.OR.B.015(b) Management system								
		ATM/ANS PROVIDER'S MANAGEMENT SYSTEM DOCUMENTATION	Documentation for management system is required in Annex							
		Annex III ATS.OR.205(a)(4)	II and specifically for SMS in Annex III.							
		AMC1 ATS.OR.205(a)(4) Management system								
		COMPLEX PROVIDERS OF ATS – ORGANISATION'S SAFETY MANAGEMENT MANUAL								
	2.1 Hazard identification	Annex II ATM/ANS.OR.B.015(e)								
2. Safety risk		Annex III ATS.OR.205(b)	This requirement is mainly part of the SMS. However, the MS							
management	2.2 Safety risk assessment and	AMC1 ATS.OR.205(b) Management system	has a requirements on ATM/ANS providers to have arrangements and coordinate so that the hazards associated to their services are appropriately identified, the risk assessed							
	mitigation	COMPLEX PROVIDERS OF ATS - SAFETY RISK MANAGEMENT	and appropriately mitigated.							

		Cross Reference Table of ICA	AO SMS to Part-ATM/ANS.OR
ICAO SMS component	ICAO SMS elements	EASA Reference to the new ATM/ANS proposal	Reason/Justification
	3.1 Safety performance monitoring and measurement	Annex II ATM/ANS.OR.B.015(a)(3) AMC1 ATM/ANS.OR.B.015(a)(3) SAFETY PERFORMANCE MONITORING AND MEASUREMENT- PROVIDERS OF ATS	The proposal is made for the management system for the management of the performance of the services and of the management system in general. However, the proposed AMC and also some GMs proposed are more detailed on safety performance monitoring and only applicable to ATS providers.
	3.2 The management of	Annex II ATM/ANS.OR.B.015(a)(4) Annex II ATM/ANS.OR.A.035 Changes - General	A general provision for the identifications of changes is included in the MS requirements and general provisions for change management are also included for all ATM/ANS providers.
3. Safety assurance	change	Annex III ATS.OR.205(c)(1)(ii)	More specific provisions on the safety analysis of safety impact are included in the SMS.
	3.3 Continuous improvement of the SMS	Annex III ATS.OR.205(c)(2) AMC1 ATS.OR.205(c)(2) Safety management system CONTINUOUS	
		IMPROVEMENT OF THE SMS GM1 ATS.OR.205(c)(2) Safety management system	This is only a requirement within the SMS and, therefore included only for ATS and CNS providers.
		CONTINUOUS IMPROVEMENT OF THE SAFETY PERFORMANCE THROUGH IMPROVEMENTS OF THE SMS	

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	Cross Reference Table of ICAO SMS to Part-ATM/ANS.OR									
ICAO SMS component	ICAO SMS elements	EASA Reference to the new ATM/ANS proposal	Reason/Justification							
	4.1 Training and education	Annex II ATM/ANS.OR.B.015(a)(5)	General requirements are included in the MS for all ATM/ANS providers and more specific requirements for safety training							
		Annex III ATS.OR.205(d)(2);(d)(3)	are included in the SMS for ATS and CNS providers.							
4. Safety promotion		Annex II ATM/ANS.OR.B.015(a)(6)								
promotion		Annex III ATS.OR.205(d)(4)	General requirements are included in the management system							
	4.2 Safety communication	AMC1 ATS.OR.205(d) Management system	for all ATM/ANS providers and more specific requirements for safety communication are included in the SMS for ATS and CNS providers.							
		TRAINING AND COMMUNICATION ON SAFETY	Civo providers.							

V. ANALYSIS OF THE IMPACTS ON ANSPS COMING FROM THE AMENDMENTS MADE TO ICAO ANNEXES REFERRED TO IN THE PROPOSED REGULATION

Analysis of impacts on ANSPs from the amendments to ICAO Annexes referenced to in the proposed Parts

ICAO Standard and Recommended practices	Amendment to the foreword of the ICAO Annex	Subject(s)	Analysis of impacts
ANNEX 11, THIRDTEENTH EDITION	48	Amendment to a definition; reduced vertical separation minimum (RVSM) monitoring; use of fully automatic observing systems for the provision of local reports; and quality management systems (QMS), the use of automation enabling digital data exchange, electronic aeronautical information publications (eAIP), the NOTAM Format and electronic terrain and obstacle (eTOD).	 The amendment introduces changes related to the definition of accident which is not affecting the service provision. Changes to electronic aeronautical data are also included. These are related to the inclusion of a 32-bit cyclic redundancy check (CRC), in order to improve protection of all integrity levels of data set. Changes in this regard are also made on Annex 15, 13th edition Amendment 36 and are, therefore, already applicable in Europe through Commission Implementing Regulation (EU) No 1035/2011. Regarding the operation of air traffic control service, the scope of the regional monitoring programs for airspaces where RVSM is applied shall be adequate to conduct analyses of aircraft group performance and evaluate the stability of altimetry system error. That may cause an impact on how the programmes are established and structured, so they may have to be updated in order to incorporate the functions that the amendment is now introducing (analyse and evaluate the stability altimetry system errors), if not already done. The amendment also introduces changes related to the operational flight information service broadcasts. Regarding the ATIS messages for both departing and arriving aircraft, it is established that the indication of the sections of runway(s) in use shall be part of the information contained

			in the ATIS message, when visibility/RVR sensors related specifically to the sections of runway(s) in use are available and the information is required by operators. It is also added that the wind direction shall be expressed in degrees magnetic. These changes affect the format and content of the ATIS messages, and, therefore, the system. While it is expected to have an initial investment cost, there are expected benefits for such changes.
ANNEX 10, Vol I SIXTH EDITION	86	Changes reflecting experience gained with initial implementation of the global navigation satellite system (GNSS) ground-based augmentation system (GBAS). a) changes to satellite-based augmentation system (SBAS) received signal power requirements; b) introduction of two new SBAS service provider identifiers; c) changes to the encoding of the runway number field in the	Both amendment 86 and amendment 87 are mainly related to changes in the Annex based on the experienced gained with the implementation and operational use of GNSS GBAS ad SBAS and the relevant additional receiver requirements. The impacts expected on SBAS service providers such as EGNOS services providers are minor as most of the new provisions are related to the receivers' requirements. These amendments did not affect Annex 10, Volumes II, II, IV and V.
		final approach segment (FAS) data block; and d) changes to GNSS antenna gain requirements.	

VI. CROSS REFERENCE TABLE 3 – Proposed rules versus ICAO Annex 3 CROSS REFERENCE TABLE EASA rules against ICAO Annex 3 SARPs

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
IR	MET.OR.005(a)	Scope and objective of meteorological services	-		-	new	-
IR	MET.OR.005(b)	Scope and objective of meteorological services	S	2.1.2	Objective, determination and provision of meteorological service	Redrafted	Additional users are listed.
IR	MET.OR.100	Quality of the data & information	-	-	-	new	-
IR	MET.OR.105(a)	Retention of information	S	9.3.4	Flight documentation	Redrafted	Simplification of the rule.
IR	MET.OR.105(b)	Retention of information	S	9.3.4	Flight documentation	No change	-
IR	MET.OR.110(a)	Information exchange requirements	S	11.1.8	Requirements for communications	No change	-
IR	MET.OR.110(b)	Information exchange requirements	S	11.1.2	Requirements for communications	Redrafted	Re-wording of the text for better clarity.
IR	MET.OR.200(a)	Watch and other meteorological information	S	3.4.2	Meteorological watch offices	No change	-
IR	MET.OR.200(b)	Watch and other meteorological information	S	7.1.5	SIGMET	Redrafted	Inclusion of ASHTAM.
IR	MET.OR.200(c)	Watch and other meteorological information	-	-	-	new	-
IR	MET.OR.200(d)	Watch and other	S	3.4.2 f)	Meteorological watch offices	Redrafted	Deletion of text non-

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
		meteorological information					relevant to EU rules.
IR	MET.OR.200(e)	Watch and other meteorological information	S	3.4.2. g)	Meteorological watch offices	Redrafted	Deletion of text non- relevant to EU rule.
IR	MET.OR.205(a)	SIGMET	S	3.4.2. b) & d)	Meteorological watch offices	Redrafted	The term 'prepare' is replaced by the term 'provide'.
IR	MET.OR.205(b)	SIGMET	S	7.1.1	SIGMET Information	Editorial change	-
IR	MET.OR.205(c)	SIGMET	S	7.1.2	SIGMET Information	Redrafted	Specifies which area is covered.
IR	MET.OR.205(d)	SIGMET	S	7.1.3	SIGMET Information	Editorial change	-
IR	MET.OR.205(e)	SIGMET	S	7.1.6	SIGMET Information	Editorial change	-
IR	MET.OR.210(a)	AIRMET	S	7.2.1 – first sentence	AIRMET Information	Redrafted	Specifies to whom AIRMET information is provided.
IR	MET.OR.210(b)	AIRMET	S	7.2.1 – second sentence	AIRMET Information	Editorial change	-
IR	MET.OR.210(c)	AIRMET	S	7.2.2	AIRMET Information	Editorial change	-
IR	MET.OR.210(d)	AIRMET	S	7.2.3	AIRMET Information	Editorial change	-
IR	MET.OR.215(a)	Forecasts and other meteorological information – General	S	3.3.2 a)	Meteorological offices	Redrafted	Limitation of the scope of responsibilities.
IR	MET.OR.215(b)	Forecasts and other	S	3.3.2 b)	Meteorological offices	Redrafted	Specifies the scope of

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
		meteorological information – General					responsibility and now also includes warnings
IR	MET.OR.215(c)	Forecasts and other meteorological information – General	S	6.2.4	Meteorological offices	Redrafted	Text from 6.2.5 added and part of the text transferred to the technical requirements part.
IR	MET.OR.215(d)	Forecasts and other meteorological information – General	S	3.3.2 d)	Meteorological offices	No change	-
IR	MET.OR.215(e)	Forecasts and other meteorological information – General	S	3.3.2 e) & f)	Meteorological offices	Redrafted	Specifies the responsibilities of the aerodrome meteorological office.
IR	MET.OR.215(f)	Forecasts and other meteorological information – General	S	3.3.2 h)	Meteorological offices	Editorial change	-
IR	MET.OR.215(g)	Forecasts and other meteorological information – General	S	10.2	Information for search and rescue services units	Redrafted	Better reflects the responsibilities of aerodrome meteorological offices.
IR	MET.OR.215(h)	Forecasts and other meteorological information – General	S	10.3	Information for aeronautical information services units	Editorial change	-
IR	MET.OR.220(a)	Aerodrome forecasts (TAF)	S	6.2.2	Aerodrome forecasts	Editorial change	-
IR	MET.OR.220(b)	Aerodrome forecasts (TAF)	S	6.2.7	Aerodrome forecasts	Editorial change	-
IR	MET.OR.225(a)	Aerodrome forecasts - Landing (TREND)	S	6.3.2	Landing forecasts	Redrafted	Split between the preparation of a forecast and the form.

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
IR	MET.OR.225(b)	Aerodrome forecasts - Landing (TREND)	S	6.3.2	Landing forecasts	Redrafted	Split between the preparation of a forecast and the form.
IR	MET.OR.226(a)	Forecasts - Take-off	S	6.4.1	Forecasts for take-off	Editorial change	-
IR	MET.OR.226(b)	Forecasts - Take-off	RP	6.4.3	Forecasts for take-off	Redrafted	Upgrade to IR.
IR	MET.OR.230(a)	Area Forecasts for low-level flights	S	6.5.1	Area forecasts for low-level flights	Editorial change	Part of the text is transferred to MET.OR.230(b).
IR	MET.OR.230(b)	Area Forecasts for low-level flights	S	6.5.1	Area forecasts for low-level flights	Editorial change	Transferred from MET.OR.230(a)
IR	MET.OR.230(c)	Area Forecasts for low-level flights	S	6.5.3	Area forecasts for low-level flights	Editorial change	Term 'watch' is added.
IR	MET.OR.235(a)	Warnings and alerts	S	7.3.1	Aerodrome warnings	Editorial change	Text not relevant to EU rules.
IR	MET.OR.235(b)	Warnings and alerts	S	7.4.1 – first sentence	Wind shear warnings and alerts	Editorial change	-
IR	MET.OR.235(c)	Warnings and alerts	S	7.4.1 – second sentence	Wind shear warnings and alerts	No change	-
IR	MET.OR.235(d)	Warnings and alerts	S				
IR	MET.OR.235(e)	Warnings and alerts	RP	7.3.2	Aerodrome warnings	Editorial change	Upgraded to IR.
IR	MET.OR.240(a)	Information for use by operator or flight crew	S	9.5.1	Information for aircraft in flight	Redrafted	'In flight re-planning' added and unnecessary text

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
							deleted.
IR	MET.OR.240(b)	Information for use by operator or flight crew	S	9.3.2	Flight documentation	Redrafted	Addition of 'flight crew'.
IR	MET.OR.245	Notification of discrepancies to the World Area Forecasts Centres (WAFC)	TS	2.2 of Appendix 2	Notification of WAFC concerning significant discrepancies	No change	-
IR	MET.OR.250(a) (1)	Meteorological reports and other information	S	4.1.3	Meteorological observations and reports	Redrafted	Additional elements for clarification.
IR	MET.OR.250(a) (2)	Meteorological reports and other information	S	4.4.2 b)	Special observations and reports	Redrafted	Part of text transferred to the above paragraph.
IR	MET.OR.250(b) (1)	Meteorological reports and other information	S	4.6.3.1	Observing and reporting meteorological elements	Redrafted	Add the use of instrumented systems to assess RVR.
IR	MET.OR.250(b) (2)	Meteorological reports and other information	S	4.6.3.5	Observing and reporting meteorological elements	Editorial change	-
IR	MET.OR.250(b) (3)	Meteorological reports and other information	RP	4.8	Observations and reports of volcanic activity	Redrafted	Editorial change in the first sentence, and the second sentence moved to AMC.
IR	MET.OR.250(b) (4)	Meteorological reports and other information	S	4.4.1	Meteorological observations and reports	Redrafted	Local special reports specified
IR	MET.OR.255(a)	Observation of meteorological elements	S	4.6.1	Observing and reporting meteorological elements	Redrafted	Addition of 'direction and speed'
IR	MET.OR.255(b)	Observation of meteorological elements	S	4.6.2	Observing and reporting meteorological elements	No change	-
IR	MET.OR.255(c)	Observation of meteorological elements	S	4.6.4	Observing and reporting meteorological elements	Redrafted	Addition of 'at the aerodrome and its vicinity'
IR	MET.OR.255(d)	Observation of meteorological elements	S	4.6.5	Observing and reporting meteorological elements	No change	-
IR	MET.OR.255(e)	Observation of	S	4.6.6	Observing and reporting	No change	-

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
		meteorological elements			meteorological elements		
IR	MET.OR.255(f)	Observation of meteorological elements	S	4.6.7	Observing and reporting meteorological elements	No change	-
IR	MET.OR.260(a) (1)	Volcanic Ash Advisory Centre (VAAC) responsibilities	S	3.5.1 c)	Volcanic ash advisory centres	New	Addition of the EACCC.
IR	MET.OR.260(a) (2)	Volcanic Ash Advisory Centre (VAAC) responsibilities	S	3.5.1. c) 1)	Volcanic ash advisory centres	No change	-
IR	MET.OR.260(a) (3)	Volcanic Ash Advisory Centre (VAAC) responsibilities	S	3.5.1. c) 1)	Volcanic ash advisory centres	No change	The ICAO text was split in two paragraphs.
IR	MET.OR.260(a) (4)	Volcanic Ash Advisory Centre (VAAC) responsibilities	S	3.5.1. c) 3)	Volcanic ash advisory centres	No change	-
IR	MET.OR.260(a) (5)	Volcanic Ash Advisory Centre (VAAC) responsibilities	S	3.5.1. c) 2)	Volcanic ash advisory centres	No change	-
IR	MET.OR.260(b)	Volcanic Ash Advisory Centre (VAAC) responsibilities	S	3.6	State volcano observatories	Redrafted	New paragraph based on 3.6.
IR	MET.OR.260(c)	Volcanic Ash Advisory Centre (VAAC) responsibilities	S	3.5.1. d)	Volcanic ash advisory centres	Redrafted	No change to second paragraph.
IR	MET.OR.260(d)	Volcanic Ash Advisory Centre (VAAC) responsibilities	S	3.5.2	Volcanic ash advisory centres	No change	-
IR	MET.OR.265(a) (1)	World Area Forecast Centre (WAFC) responsibilities	S	3.2.1 a)	World area forecast centres	Editorial change	-

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
IR	MET.OR.265(a) (2)	World Area Forecast Centre (WAFC) responsibilities	S	3.2.1 b)	World area forecast centres	Redrafted	To include volcanic activity and accidental release of radioactive material.
IR	MET.OR.265(b)	World Area Forecast Centre (WAFC) responsibilities	RP	11.3	Use of aeronautical fixed service communications — world area forecast system products	Redrafted	Part of text not relevant and upgrade to IR.
IR	MET.OR.270(a)	Tropical Cyclone Advisory Centres responsibilities	S	3.7 b)	Tropical cyclone advisory centres	No change	-
IR	MET.OR.270(b)	Tropical Cyclone Advisory Centres responsibilities	S	3.7 c)	Tropical cyclone advisory centres	No change	-
GM	GM1 MET.OR.005(b)	Scope and objective of meteorological services	-	-	-	new	-
GM	GM1 MET.OR.100	Quality of the data & information	S	4.1.9	Aeronautical meteorological stations and observations	Redrafted	Added material to complement the guidance.
GM	GM1 MET.OR.200(a)	Watch and other meteorological information	RP	3.4.3	Meteorological watch offices	No change	-
GM	GM1 MET.OR.200(e)	Watch and other meteorological information	Note	3.4.2	Meteorological watch offices	Editorial change	-
AMC	AMC1 MET.OR.205(a)	SIGMET	TS (S)	1.1.3 – second sentence – Appendix 6	Format of SIGMET messages	No change in text but downgraded to AMC	-
AMC	AMC1 MET.OR.205(d)	SIGMET	RP	7.1.4	SIGMET	No change	-

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
AMC	AMC1 MET.OR.215(a)	Forecasts and other meteorological information - General	TS	2.1 – Appendix 2	Use of WAFS products	Editorial change	-
GM	GM1 MET.OR.215(a)	Forecasts and other meteorological information - General	S	3.3.2. a) second sentence	Meteorological offices	No change	ICAO Standard downgraded to GM.
GM	GM1 MET.OR.215(b)	Forecasts and other meteorological information - General	S	6.1.2	Interpretation and use of forecasts	Editorial change	-
GM	GM1- MET.OR.215(c)	Forecasts and other meteorological information - General	Note	6.2	Aerodrome forecasts	No change	-
GM	GM1 MET.OR.215(d)	Forecasts and other meteorological information – General	S	9.1.10 – second sentence	General provisions	No change	-
GM	GM2 MET.OR.215(d)	Forecasts and other meteorological information – General	-	-	-	new	-
GM	GM1 MET.OR.225	Forecasts for Landing (TREND)	S	6.3.1	Landing forecasts	Redrafted	Part of text not relevant to EU rules.
GM	GM1 MET.OR.225	Forecasts for Landing (TREND)	S	6.3.3	Landing forecasts	Editorial change	-
AMC	AMC1 MET.OR.235(b)	Warnings and alerts	RP	7.4.4	Wind shear warnings and alerts	No change	-
GM	GM1 MET.OR.235(d)	Warnings and alerts	Note	7.4	Wind shear warnings and alerts	No change	-
GM	GM1	Warnings and alerts	RP	7.4.2	Wind shear warnings and	Editorial	-

NPA Rule IR AMC GM	NPA rule Reference	NPA rule Title	ICAO rule S, RP Note	ICAO rule reference	ICAO rule Title	Changes to ICAO Annex 3 Identificati on	Changes to ICAO Annex 3 Description
	MET.OR.235(e)				alerts	change	
GM	GM1 MET.OR.245	Notification of discrepancies to the World Area Forecast Centre (WAFC)	Note	2.2.	Notification of WAFC concerning significant discrepancies	No change	-
AMC	AMC1 MET.OR.250(a) (1)	Reports and other information	S	4.3.1	Routine observations and reports	No change	-
AMC	AMC1 MET.OR.250(a) (2)	Reports and other information	S	4.3.3	Routine observations and reports	Redrafted	To reflect the current European practice.
GM	GM1 MET.OR.250(a)	Reports and other information	S	4.1.1 – second sentence	Aeronautical meteorological stations and observations	No change	-
GM	GM1 MET.OR.250(a)	Reports and other information	Note	4.1.1	Aeronautical meteorological stations and observations	Redrafted	Part of the text is not relevant to EU rules.
AMC	AMC1 MET.OR.250(b)	Reports and other information	S	4.6.3.4	Observing and reporting meteorological elements	Redrafted	Paragraph for Cat I deleted.
AMC	AMC1- MET.OR.250(b) (3)	Reports and other information	RP	4.8 – second sentence	Observations and reports of volcanic activity	No change	-
AMC	AMC1 MET.OR.265(a) (1)	WAFC responsibilities	TS	1.2	Upper-air gridded forecasts	Redrafted	Downgraded at AMC level.
GM	GM1 MET.OR.265(a) (1)	WAFC responsibilities	Note	3.2	World area forecast centres	No change	-

VII. Drafting document table – ICAO Annex 3 versus the proposed rules in Annex IV on MET

Refer to separate document in NPA 2013-xx (E).