European Union Aviation Safety Agency



Explanatory Note to ED Decisions 2024/001/R and 2024/002/R

in accordance with Article 4(2) of MB Decision 01-2022

2nd set of acceptable means of compliance and guidance material supporting the new regulatory framework on the conformity assessment of ATM/ANS systems and ATM/ANS constituents

Acceptable means of compliance and guidance material as regards organisations involved in the design or production of ATM/ANS systems and ATM/ANS constituents

RMT.0161 (SUBTASK 3)

EXECUTIVE SUMMARY

These Decisions establish the acceptable means of compliance (AMC) and guidance material (GM) associated with the applicable requirements on the approval of organisations involved in the design or production (hereafter 'DPOs') of air traffic management/air navigation services systems and air traffic management/air navigation services constituents (hereafter 'ATM/ANS equipment'). These AMC & GM also complement the 1st set of AMC & GM established with ED Decision 2023/016/R for the application of the conformity assessment framework for ATM/ANS equipment.

Due to the novelty of the subject, it is important to provide the necessary means for demonstration of compliance by the DPOs and for the application of the above-mentioned framework.

This regulatory material is expected to further facilitate the effective modernisation of the European air traffic management network (EATMN), ensuring more streamlined conformity assessment mechanisms and increased harmonisation and interoperability of ATM/ANS equipment brought to the EU market.

REGULATION(S) TO BE AMENDED/ISSUED	ED DECISIONS TO BE ISSUED/AMENDED/REPEALED
N1/A	 ED Decision 2023/016/R — AMC & GM to to the Articles of
N/A	Commission Delegated Regulation (EU) 2023/1768
	 ED Decisions — AMC & GM to support the application of
	Commission Delegated Regulation (EU) 2023/1768 and
	Commission Implementing Regulation (EU) 2023/1769

AFFECTED STAKEHOLDERS: Organisations involved in the design and/or production of ATM/ANS equipment, ATM/ANS providers, national competent authorities (NCAs), and EASA.

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

RELATED DOCUMENTS / INFORMATION

- ToR RMT.0161; NPA 2022-09; NPA 2022-107; Opinion No 01/2023; NPA 2023-05
- https://www.easa.europa.eu/en/newsroom-and-events/events/easa-workshop-new-conformity-assessmentframework-atmans-systems-and

PLANNING MILESTONES: See the latest European Plan for Aviation Safety (EPAS) edition.



Table of contents

1.	About these Decisions		3
2.	In summary — why and what		
	•		
	·	hieve — objectives	
		nieve it — overview of the Decisions	
	2.3.1. Additional AMC & G	M to Commission Delegated Regulation (EU) 2023/1768	6
	2.3.2. AMC & GM to Comn	nission Implementing Regulation (EU) 2023/1769	6
	2.4. What are the stakeh	olders' views	7
3.	Expected benefits and d	rawbacks of the regulatory material	8
4.	Monitoring and evaluat	ion	9
5.	Proposed actions to sup	port implementation	10
6.	References		11
	6.1. Related EU regulation	ons	11
		ons	
	6.3. Other references		12

1. About these Decisions

The European Union Aviation Safety Agency (EASA) identified the need for certification or declaration of certain ATM/ANS equipment as provided for in Regulation (EU) 2018/1139¹ (the EASA Basic Regulation). Recognising that in the future the provision of ATM/ANS will rely more heavily on new digital technologies and ATM/ANS systems than today, action at European Union level is required to ensure the safety and interoperability of such systems. Moreover, ATM/ANS systems and ATM/ANS constituents (hereafter 'ATM/ANS equipment') are key and integral elements of the European ATM network (EATMN) and form a fundamental component to ensure safe flight operations within the single European sky (SES) airspace (as described in Chapter 2). EASA published Opinion No 01/2023 on the basis of which the European Commission adopted the new conformity assessment framework for ATM/ANS equipment.

This rulemaking activity is a subsequent step of the newly established framework for ATM/ANS equipment. Due to the novelty of the subject, it is important to provide the necessary means for demonstration of compliance by the DPOs and for the application of the above-mentioned recently adopted framework.

EASA developed the regulatory material in question in line with the Basic Regulation and the Rulemaking Procedure², as well as in accordance with the objectives and working methods described in the ToR for RMT.0161³. EASA developed this regulatory material with the support of Rulemaking Group (RMG) RMT.0161. Thereafter, the draft regulatory material was publicly consulted through NPA 2023-05⁴ and through a focused consultation workshop held on 4 July 2023. Recognising the importance of the timely implementation, EASA issued on 26 October 2023 the 1st set of the associated Decisions with a view to effectively supporting the implementation of the new framework addressing the detailed specifications (DSs) and the most essential set of AMC & GM related to measures during the transitional period; in particular, this concerned the issue of statement of compliance (SoC) by ATM/ANS providers and their oversight. The regulatory material introduced with these Decisions constitutes the 2nd set of the stepped-approach publication. EASA reviewed the comments received through the NPA consultation as well as those through the workshop and duly considered them for the preparation of the regulatory material presented here.

⁴ https://www.easa.europa.eu/en/document-library/notices-of-proposed-amendment/npa-2023-05



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

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

³ https://www.easa.europa.eu/document-library/terms-of-reference-and-group-compositions/tor-rmt0161

2. In summary — why and what

2.1. Why we need to act

The Basic Regulation lays down interoperability requirements for the EATMN and mandates the development of the related delegated and implementing acts as regards the certification or declaration of ATM/ANS equipment as well as of the organisations involved in their design, production, and maintenance.

The interoperability Regulation (Regulation (EC) No 552/2004⁵) was repealed by the Basic Regulation, whose Article 139 establishes the transitional provisions whereby certain articles of said interoperability Regulation and its Annexes III and IV remain applicable until the date of application of the new framework, and in any case not later than 12 September 2023.

In this context, the new regulatory framework on the ATM/ANS equipment proposed with EASA Opinion No 01/2023 was adopted by the European Commission. The new framework consists of five Regulations:

- Commission Delegated Regulation (EU) 2023/1768⁶ of 14 July 2023 laying down detailed rules for the certification and declaration of air traffic management/air navigation services systems and air traffic management/air navigation services constituents;
- Commission Implementing Regulation (EU) 2023/1769⁷ of 12 September 2023 laying down technical requirements and administrative procedures for the approval of organisations involved in the design or production of air traffic management/air navigation services systems and constituents and amending Implementing Regulation (EU) 2023/203;
- Commission Implementing Regulation (EU) 2023/1770⁸ of 12 September 2023 laying down provisions on aircraft equipment required for the use of the Single European Sky airspace and operating rules related to the use of the Single European Sky airspace and repealing Regulation (EC) No 29/2009 and Implementing Regulations (EU) No 1206/2011, (EU) No 1207/2011 and (EU) No 1079/2012;
- Commission Implementing Regulation (EU) 2023/1771⁹ of 12 September 2023 amending Implementing Regulation (EU) 2017/373 as regards air traffic management and air navigation services systems and constituents and repealing Regulations (EC) No 1032/2006, (EC) No 633/2007 and (EC) No 262/2009; and
- Commission Implementing Regulation (EU) 2023/1772¹⁰ of 12 September 2023 amending Implementing Regulation (EU) No 923/2012 as regards the operating rules related to the use of

¹⁰ OJ L 228, 15.9.2023, p. 73.



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) (Official Journal L 096, 31/03/2004 P. 0026) (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32004R0552&qid=1697452833323).

⁶ OJ L 228, 15.9.2023, p. 1.

⁷ OJ L 228, 15.9.2023, p. 19.

⁸ OJ L 228, 15.9.2023, p. 39.

⁹ OJ L 228, 15.9.2023, p. 49.

Air Traffic Management and Air Navigation Services systems and constituents in the Single European Sky airspace and repealing Regulation (EC) No 1033/2006.

The new regulatory framework enables the conformity assessment of ATM/ANS equipment by means of certification or declaration(s), as well as by the approval of organisations involved in the design or production of such equipment.

The AMC & GM issued with these Decisions are associated with:

- certification and declaration aspects laid down in Commission Delegated Regulation (EU)
 2023/1768 for the certification and declaration of ATM/ANS equipment; and
- Commission Implementing Regulation (EU) 2023/1769 for the approval of organisations involved in the design or production of ATM/ANS equipment (DPO approval).

2.2. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. The ED Decisions presented here are expected to contribute to achieving these overall objectives by addressing the issues described in Section 2.1.

More specifically, with the regulatory material presented here, EASA intends to support the application of:

- Commission Delegated Regulation (EU) 2023/1768 of 14 July 2023 laying down detailed rules for the certification and declaration of air traffic management/air navigation services systems and air traffic management/air navigation services constituents; and
- Commission Implementing Regulation (EU) 2023/1769 of 12 September 2023 laying down technical requirements and administrative procedures for the approval of organisations involved in the design or production of air traffic management/air navigation services systems and constituents.

In this context, the specific objectives of the AMC & GM are to:

- provide a common understanding of the new requirements;
- support the effective and harmonised attestation and conformity assessment and oversight of ATM/ANS equipment; and
- support the application by all effected/regulated parties,

while promoting and enabling the development and implementation of new technologies and allocating clear responsibilities to the various actors involved in this activity.

Further details on the objectives of this regulatory framework are explained in Section 2.2 of EASA Opinion No 01/2023.

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

To facilitate the application of the new regulatory framework on ATM/ANS conformity assessment, this regulatory material encompasses:

- one ED Decision amending ED Decision 2023/016/R to complement the new requirements laid down in Commission Delegated Regulation (EU) 2023/1768 on the certification and declaration(s) of ATM/ANS equipment; and
- one new ED Decision associated with Commission Implementing Regulation (EU) 2023/1769 on technical requirements and administrative procedures for the approval of organisations involved in the design or production of air traffic management/air navigation services systems and constituents.

2.3.1. Additional AMC & GM to Commission Delegated Regulation (EU) 2023/1768

Regulation (EU) 2023/1768 establishes the new framework on the conformity assessment of ATM/ANS equipment taking into account the nature and the risk of the operation or functionality enabled by the particular ATM/ANS equipment as per point 3 of Annex VIII to the Basic Regulation. It introduces three different instruments based on the principles established by the Basic Regulation:

- Certification by EASA of ATM/ANS equipment based on DSs (Article 4);
- Declaration of design compliance by an approved DPO, for ATM/ANS equipment based on DSs (Article 5); and
- SoC by the ATM/ANS provider or by an approved DPO acting on behalf of the ATM/ANS provider, confirming that the equipment complies with the technical standards listed in DSs (Article 6).

To support the smooth application of the new regulatory framework, the regulatory material introduced with ED Decision 2023/016/R addresses:

- an extensive set of AMC & GM associated with Article 6 to address the SoC, the template, the
 activities to be performed before the SoC is issued, as well as to address the cases in which a
 reissue of the SoC is required, i.e. management of minor and major changes of the ATM/ANS
 equipment subject to the SoC; and
- an essential set of AMC & GM relating to the transitional provisions and the set of information to be provided from the competent authority to the Agency for the purpose of evaluation of the legacy systems.

On the other hand, this regulatory material introduces:

- GM illustrating the interactions between the regulated parties when the ATM/ANS equipment is subject to certification, declaration of design compliance or SoC;
- AMC & GM on the novelties introduced with the new framework such as the ATM/ANS equipment certification basis and the EASA level of involvement.

2.3.2.AMC & GM to Commission Implementing Regulation (EU) 2023/1769

Regulation (EU) 2023/1769 establishes the technical requirements and administrative procedures for the approval of organisations involved in the design or production of ATM/ANS systems and ATM/ANS constituents subject to certification in accordance with Article 4 of Delegated Regulation (EU) 2023/1768 or declaration of design compliance in accordance with Article 5 of that Regulation.

To support the smooth application of the new regulatory framework, this regulatory material addresses the following:

- application for a design and/or production organisation approval and demonstration of capability;
- failures, malfunctions and defects;
- management system;
- contracted activities; and
- the issue of the release form for the ATM/ANS equipment after being manufactured.

2.4. What are the stakeholders' views

The comments received via the public consultation of NPA 2023-05 and the workshop held on 4 July 2023 essentially contributed to the improvement of the regulatory material introduced with these ED Decisions.

Besides the supporting comments, the feedback received addressed specifically topics such as the classification of minor/major changes of ATM/ANS equipment, activities before the issue of the SoC and their oversight as well as the transitional measures.

In addition, EASA duly considered the high number of responses to specific questions addressed to stakeholders in NPA 2023-05, which resulted in the fine tuning of the regulatory material at stake. The most significant feedback concerns the classification of changes which can be introduced without a new product assessment.

The comments received and the related EASA responses to them will be presented in Comment-Response Document (CRD) 2023-05, which will be published after the issue of these ED Decisions and which will complete the rulemaking activities of RMT.0161 and RMT.0524.

3. Expected benefits and drawbacks of the regulatory material

The regulatory material introduced with these ED Decisions complements the regulatory framework on the new conformity assessment framework consisting of the five referenced Commission Delegated and Implementing Regulations (EU) 2023/1768, 2023/1769, 2023/1770, 2023/1771 and 2023/1772.

The main benefits of the regulatory material introduced are that:

- when the regulated parties make use of it, they can demonstrate compliance with the applicable requirements;
- it increases efficiency in certification and oversight;
- it facilitates harmonisation in the application of the regulatory framework on the conformity assessment.

No drawbacks are expected.

4. Monitoring and evaluation

EASA will monitor whether the intended objectives will be achieved as part of the monitoring and evaluation actions described in Chapter 5 of EASA Opinion No 01/2023.

As this regulatory material complements the first set of DSs and AMC & GM to enable the certification and declaration scheme for certain ATM/ANS equipment that will apply to new and modified (e.g. upgraded) ATM/ANS equipment designs as well as the approval of DPOs, EASA will monitor its implementation as follows:

- (a) by evaluating feedback from future ATM/ANS equipment certification projects; and
- (b) in the long term, by evaluating the trend of the issues encountered with the ATM/ANS equipment during the investigation of accidents and incidents, as well as other feedback from ATM/ANS equipment manufacturers, ATM/ANS service providers, and oversight authorities.

Further to monitoring, an evaluation might be performed in the long term but in any case, not earlier than 5 years from the completion of the transition period stipulated for the new conformity assessment framework; this evaluation would require the availability of experience gained from several ATM/ANS equipment certification projects and the issuance of SoCs by ATM/ANS service providers as well as the oversight of the SoCs by their competent authorities.

Feedback on item (b) above would be available once new and modified (e.g. upgraded) ATM/ANS equipment designs have entered into service and sufficient experience has been gained with their operation.

5. Proposed actions to support implementation

In order to support affected stakeholders in the implementation of the regulatory material included in the ED Decisions, EASA plans to take the following actions:

- Focused communication for Advisory Body meeting(s) (MAB/SAB/TeB/TEC/COM)
 (Advisory Body members)
- Detailed explanation with clarifications on the EASA website
 (Primarily targeted audience: industry, competent authorities)
- Dedicated thematic workshops/sessions
 (Primarily targeted audience: industry, competent authorities)

6. References

6.1. Related EU regulations

- Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (OJ L 212, 22.8.2018, p. 1)
- Commission Delegated Regulation (EU) 2023/1768 of 14 July 2023 laying down detailed rules for the certification and declaration of air traffic management/air navigation services systems and air traffic management/air navigation services constituents (Commission Delegated Regulation (EU) 2023/1768 of 14 July 2023 laying down detailed rules for the certification and declaration of air traffic management/air navigation services systems and air traffic management/air navigation services constituents (OJ L 228, 15.9.2023, p. 1)
- Commission Implementing Regulation (EU) 2023/1769 of 12 September 2023 laying down technical requirements and administrative procedures for the approval of organisations involved in the design or production of air traffic management/air navigation services systems and constituents and amending Implementing Regulation (EU) 2023/203 (OJ L 228, 15.9.2023, p. 18)
- Commission Implementing Regulation (EU) 2023/1770 of 12 September 2023 laying down provisions on aircraft equipment required for the use of the Single European Sky airspace and operating rules related to the use of the Single European Sky airspace and repealing Regulation (EC) No 29/2009 and Implementing Regulations (EU) No 1206/2011, (EU) No 1207/2011 and (EU) No 1079/2012 (OJ L 228, 15.9.2023, p. 39)
- Commission Implementing Regulation (EU) 2023/1771 of 12 September 2023 amending Implementing Regulation (EU) 2017/373 as regards air traffic management and air navigation services systems and constituents and repealing Regulations (EC) No 1032/2006, (EC) No 633/2007 and (EC) No 262/2009 (OJ L 228, 15.9.2023, p. 49)
- Commission Implementing Regulation (EU) 2023/1772 of 12 September 2023 amending Implementing Regulation (EU) No 923/2012 as regards the operating rules related to the use of Air Traffic Management and Air Navigation Services systems and constituents in the Single European Sky airspace and repealing Regulation (EC) No 1033/2006
- Commission Implementing Regulation (EU) Commission Implementing Regulation (EU) 2017/373 of 1 March 2017 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011, (EU) No 1035/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011 (OJ L 62, 8.3.2017, p. 1)

6.2. Related EASA decisions

ED Decision 2023/016/R 'AMC & GM to the Articles of Commission Delegated Regulation (EU)
 2023/1768 — Issue 1'

6.3. Other references

 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)