

## **European Union Aviation Safety Agency**

## **Terms of Reference**

for rulemaking task RMT.0682

# Implementation of the regulatory needs of the Single European Sky ATM Research (SESAR) common projects

ISSUE 1

#### Issue/rationale

The SESAR Joint Undertaking has developed and continues to develop a number of new technological and operational solutions that aim to improve the efficiency and safety of European air traffic management (ATM) operations. Some of these solutions have been mandated for implementation. This, together with the developments in other Regions and States, requires the initiation of consolidated and coordinated implementation support actions that look holistically at the requirements that will facilitate the achievement of the operational improvements and new ATM operational concepts in a safe, interoperable and efficient manner.

Action area: Potentially affected rules: SESAR deployment Regulation (EU) 2017/373 Regulation (EU) No 965/2012 Regulation (EU) No 923/2012 Regulation (EU) 2015/340 Regulation (EU) No 139/2014 Regulation (EU) No 1332/2011

Regulation (EU) 2018/1048

CS-25 CS-23 CS-29 CS-ACNS CS-ETSO CS/GM MMEL AMC and GM to AUR

AMC and GM to Commission Implementing Regulation (EU) 2017/373

AMC and GM to the Standardised European Rules of the Air

AMC and GM to the ATCO Licencing Regulation

GM to Annex I (Definitions) to Commission Regulation (EU) No 965/2012

AMC and GM to Part-ARO AMC and GM to Part-ORO AMC and GM to Part-CAT AMC and GM to Part-SPA AMC and GM to Part-NCC AMC and GM to Part-NCO AMC and GM to Part-SPO

Affected stakeholders: Providers of ATM/ANS (ANSPs); aircraft operators; aerodrome operators; aircraft and system/equipment

manufacturers; Member States (MSs); (including Military) competent authorities (CAs); production

organisation approval (POA) holders; training organisation (TOs)

**Driver:** Efficiency/proportionality Impact assessment: TBA

Rulemaking group: Rulemaking Procedure: No (only expert groups)
Standard/Direct/Accelerated

EASA rulemaking process milestones

Start Terms of Reference Consultation Notice of Proposed Amendment Proposal to Commission

Adoption by Commission Implementing Rules

Decision

Certification Specifications,
Acceptable Means of Compliance,
Guidance Material











Today

10.12.2019 **2021/Q2** 

2022/Q4

2023/Q1

2023/Q1



### 1. Why we need to change the rules — issue/rationale

The SESAR Joint Undertaking has developed and continues to develop ATM operational improvements based on new technological and operational solutions (e.g. U-space technical solutions, virtualisation, cloud-based architecture, remote tower operations, and communication, navigation and surveillance solutions) that aim to improve the efficiency and safety of European ATM operations. A number of these improvements have been or are envisaged to be mandated for implementation via the application of common projects<sup>1</sup>; it is, therefore, important that the safety and interoperability requirements are correctly reflected and attributed to the applicable stakeholders. It is also important to recognise that other Regions and States are developing operational improvements (e.g. NextGen) or are implementing the improvements as specified in ICAO Doc 9750 'Global Air Navigation Plan' (GANP). As such, there is a need to initiate consolidated and coordinated actions that address holistically the implementation needs and facilitate the achievement of the operational improvements and ATM operational concepts, with the expectation to improve capacity, efficiency, safety, and security while ensuring interoperability in a synchronised manner among stakeholders, not only with respect to European operations but globally.

## 2. What we want to achieve — objective

The general objective of this rulemaking task (RMT) is the development of the regulatory enablers and promotion material, as required, to enable the safe, efficient, interoperable and timely deployment of the operational improvements based on SESAR solutions stemming from the European ATM Master Plan. Furthermore, the task will take into account the content of the Airspace Architecture study and the associated recommendations stemming from the Transition Plan, as well as those of the Wise Persons Group. Regulatory enablers are also required to support the operation of European aircraft in non-European Union States and Regions that deploy ATM improvements in accordance with the GANP. The subjects addressed by this RMT will be those that are not covered by other specific RMTs.

This RMT is purposed to primarily address and support the implementation needs, when known and found necessary, of the following essential operational changes:

- CNS infrastructure and services,
- ATM interconnected network,
- digital AIM and MET services,
- U-space services,
- virtualisation of service provision,
- airport and TMA performance,
- fully dynamic and optimised airspace,
- trajectory-based operations,
- multimodal mobility and integration of all airspace users.

It will also address the implementation needs stemming from the ICAO Aviation System Block Upgrades (ASBUs) to support global operations.

Commission Implementing Regulation (EU) No 409/2013 of 3 May 2013 on the definition of common projects, the establishment of governance and the identification of incentives supporting the implementation of the European Air Traffic Management Master Plan (OJ L 123, 4.5.2013, p. 1).



Because of the generic nature of this task, it is open-ended and has no end date.

#### 3. How we want to achieve it

In order to achieve the above objectives of this RMT, EASA will:

- review the availability and maturity of SESAR solutions and related documentation;
- review the need for timely deployment and the need to support safety, security, interoperability, and efficiency;
- review the structure and contents of the implementing rules (IRs) and of the related acceptable means of compliance and/or guidance material (AMC/GM) that support the single European sky (SES) and the EASA Basic Regulation (Regulation (EU) 2018/1139<sup>2</sup>);
- perform an impact assessment of the regulatory options, making due use of the available SESAR supporting documentation;
- establish the appropriate actions in response to the identified needs.

Each individual proposed package (i.e. rulemaking activities or implementation support) will, however, provide the specific planning and intended dates for the issuing of the respective deliverables, which may consist of supporting material, decisions (AMC/GM) and/or, where needed, opinions (with draft IRs) or additional EASA actions<sup>3</sup>.

#### 4. What are the deliverables

Depending of the specific action, the following main deliverables are envisaged:

- an NPA describing the subjects selected and proposing amendments to IRs, certification specifications (CSs), and AMC or GM, as required;
- a comment-response document (CRD) to the above-mentioned NPA; and
- an opinion and/or decision; or
- safety promotion/implementation support documentation.

#### 5. How we consult

Focused consultations may be organised, as required, prior to the publication of NPAs as well as during the review of the comments resulting from the publication of NPAs. This will be determined during the drafting phase and may include:

- technical meetings with affected stakeholders;
- workshops;
- conferences (including teleconferences); and

When the action is implementation support or safety promotion, no NPA will be issued.



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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).

written Advisory Body (AB) consultations.

## 6. Profile and contribution of the rulemaking group

For this RMT, no permanent rulemaking group (RMG) is envisaged. However, where deemed necessary, ad hoc expert groups will be established consisting of representatives from the affected stakeholders. The expert groups will provide technical and operational expertise during the drafting phase as well as support the review of comments received through consultations. In this case, a call for nominations for establishing the expert group(s) will be circulated to the Advisory Bodies.

The profile required for the potential members of the expert groups will be described and requested as and when required.

#### 7. Reference documents

#### 7.1. Potentially affected regulations (non-exhaustive list)

- 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 (OJ L 62, 8.3.2017, p. 1)
- Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1)
- Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (OJ L 281, 13.10.2012, p. 1)
- Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 44, 14.2.2014, p. 1)
- Commission Regulation (EU) 2015/340 of 20 February 2015 laying down technical requirements and administrative procedures relating to air traffic controllers' licences and certificates pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 923/2012 and repealing Commission Regulation (EU) No 805/2011(OJ L 63, 6.3.2015, p. 1)
- Commission Regulation (EU) No 1332/2011 of 16 December 2011 laying down common airspace usage requirements and operating procedures for airborne collision avoidance (OJ L 336, 20.12.2011, p. 20)
- Commission Implementing Regulation (EU) 2018/1048 of 18 July 2018 laying down airspace usage requirements and operating procedures concerning performance-based navigation (OJ L 189, 26.7.2018, p. 3)

Other regulations that may be affected and require amendments will be identified in the context of this RMT. Proposals for amendments may be included in this RMT or additional RMTs may be initiated, as appropriate.

#### 7.2. Potentially affected decisions (non-exhaustive list)

- Decision No. 2003/2/RM of the Executive Director of the Agency of 17 October 2003 on certification specifications, including airworthiness codes and acceptable means of compliance, for large aeroplanes (« CS-25 »)
- Decision No. 2003/14/RM of the Executive Director of the Agency of 14 November 2003 on certification specifications, including airworthiness codes and acceptable means of compliance for normal, utility, aerobatic and commuter category aeroplanes (« CS-23 »)
- Decision No. 2003/16/RM of the Executive Director of the Agency of 14 November 2003 on certification specifications for large rotorcraft (« CS-29 »)

- Executive Directors Decision 2019/011/R of 26 April 2019 issuing Certification Specifications for Airborne Communications Navigation and Surveillance (CS-ACNS) and amending General Acceptable Means of Compliance for airworthiness of products, parts and appliances (AMC-20 — 'CS-ACNS Issue 2'
- Decision No. 2003/10/RM of the Executive Director of the Agency of 24 October 2003 on certification specifications, including airworthiness codes and acceptable means of compliance, for European Technical Standard Orders («CS-ETSO»)
- Decision 2014/004/R of the Executive Director of the Agency of 31 January 2014 adopting Certification Specifications and Guidance Material for Master Minimum Equipment List — 'CS-MMEL – Initial issue'
- Decision N° 2012/002/R of the Executive Director of the Agency of 8 March 2012 on the acceptable means of compliance and guidance material for common airspace usage requirements and operating procedures — 'AMC/GM to AUR'
- Executive Director Decision 2017/001/R of 8 March 2017 issuing acceptable means of compliance and guidance material to Commission Implementing Regulation (EU) 2017/373 — 'Common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight'
- Decision 2013/013/R of the Executive Director of the European Aviation Safety Agency of 17 July 2013 adopting the Acceptable Means of Compliance and Guidance Material to Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/20101 'Acceptable Means of Compliance and Guidance Material to the rules of the air'
- Decision 2015/010/R of the Executive Director of the Agency of 13 March 2015 adopting Acceptable
   Means of Compliance and Guidance Material to Commission Regulation (EU) 2015/340
- Decision N° 2012/015/Directorate R of the Executive Director of the Agency of 24th October 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council 'Guidance Material to Annex I Definitions'
- Decision 2014/025/R of the Executive Director of the Agency of 28 July 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-ARO of Regulation (EU) No 965/2012 and repealing Decision 2014/014/R of the Executive Director of the Agency of 24 April 2014 'AMC and GM to Part-ARO Issue 3'
- Decision 2014/017/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-ORO of Regulation (EU) No 965/2012 and repealing Decision 2012/017/R of the Executive Director of the Agency of 24 October 2012 'AMC and GM to Part-ORO Issue 2'
- Decision 2014/015/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable
   Means of Compliance and Guidance Material to Part-CAT of Regulation (EU) No 965/2012 and

- repealing Decision 2012/018/R of the Executive Director of the Agency of 24 October 2012 'AMC and GM to Part-CAT — Issue 2'
- Decision N° 2012/019/Directorate R of the Executive Director of the Agency of 24th October 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council — 'Acceptable Means of Compliance and Guidance Material to Part-SPA'
- Decision N° 2013/021/Directorate R of the Executive Director of the Agency of 23 August 2013 on adopting Acceptable Means of Compliance and Guidance Material for Non-commercial operations with complex motor-powered aircraft (Part-NCC)
- Decision 2014/016/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-NCO of Regulation (EU) No 965/2012 and repealing Decision 2013/022/R of the Executive Director of the Agency of 23 August 2013 — 'AMC and GM to Part-NCO — Issue 2'
- Decision 2014/018/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-SPO of Regulation (EU) No 965/2012 -'AMC and GM to Part-SPO'

Other decisions that may be affected and require amendments will be identified in the context of this RMT. Proposals for amendments may be included in this RMT or additional RMTs may be initiated, as appropriate.

#### 7.3. Reference documents (non-exhaustive list)

- 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)
- 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 096, 31.3.2004, p. 1)
- 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)
- Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 (OJ L 56, 25.2.2019, p. 1)
- Commission Implementing Regulation (EU) 2019/123 of 24 January 2019 laying down detailed rules for the implementation of air traffic management (ATM) network functions and repealing Commission Regulation (EU) No 677/2011 (OJ L 28, 31.1.2019, p. 1)

- Commission Implementing Regulation (EU) No 716/2014 of 27 June 2014 on the establishment of the Pilot Common Project supporting the implementation of the European Air Traffic Master Plan (OJ L 190, 28.6.2014, p. 19)
- European Plan for Aviation Safety (EPAS)<sup>4</sup>
- European ATM Master Plan, Fourth Edition
- Airspace Architecture Study Proposal for the future architecture of the European airspace created by SESAR Joint Undertaking, 2019
- Future architecture of the European airspace Transition Plan 2019
- Report of The Wise Persons Group on the Future of The Single European Sky, April 2019
- ICAO Doc 9750 Global Air Navigation Plan, Sixth Edition
- ICAO Doc 10004 Global Aviation Safety Plan, 2020-2022 Edition
- Commission Regulation (EC) No 1033/2006 of 4 July 2006 laying down the requirements on procedures for flight plans in the pre-flight phase for the single European sky (OJ L 186, 7.7.2006, p. 46)
- Commission Regulation (EC) No 1032/2006 of 6 July 2006 laying down requirements for automatic systems for the exchange of flight data for the purpose of notification, coordination and transfer of flights between air traffic control units (OJ L 186, 7.7.2006, p. 27)
- Commission Regulation (EC) No 633/2007 of 7 June 2007 laying down requirements for the application of a flight message transfer protocol used for the purpose of notification, coordination and transfer of flights between air traffic control units (OJ L 146, 8.6.2007, p. 7)
- Commission Regulation (EC) No 262/2009 of 30 March 2009 laying down requirements for the coordinated allocation and use of Mode S interrogator codes for the single European sky (OJ L 84, 31.3.2009, p. 20)
- Commission Regulation (EC) No 29/2009 of 16 January 2009 laying down requirements on data link services for the single European sky (OJ L 13, 17.1.2009, p. 3)
- Commission Regulation (EU) No 73/2010 of 26 January 2010 laying down requirements on the quality of aeronautical data and aeronautical information for the single European sky (OJ L 23, 27.1.2010, p. 6)
- Commission Implementing Regulation (EU) No 1206/2011 of 22 November 2011 laying down requirements on aircraft identification for surveillance for the single European sky (OJ L 305, 23.11.2011, p. 23)
- Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky (OJ L 305, 23.11.2011, p. 35)
- Commission Implementing Regulation (EU) No 1079/2012 of 16 November 2012 laying down requirements for voice channels spacing for the single European sky (OJ L 320, 17.11.2012, p. 14)

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