



Terms of Reference

for a rulemaking task

Technical requirements and operational procedures for the provision of data for airspace users for the purpose of air navigation

RMT.0593 & RMT.0594 — ISSUE 1 — 11/10/2013

	Applicability	Process map	
Affected regulations and decisions:	Commission Implementing Regulation (EU) No 1034/2011; Commission Implementing Regulation (EU) No 1035/2011; Commission Implementing Regulation (EU) No 965/2012; EASA Opinion No 1/2005 (GM to Part 21)	Rulemaking lead:	R5
Affected stakeholders:	Data service providers; aircraft operators and end users; competent authorities; and EASA	Concept Paper:	Yes
Driver/origin:	Legal obligation	Rulemaking group:	Yes
Reference:	Article 8b of Regulation (EC) No 216/2008; Opinion No 01/2005; Commission letter A/9188 of 17 October 2012	RIA type:	None
		Technical consultation during NPA drafting:	TBD
		Publication date of the NPA:	2014/Q3
		Duration of NPA consultation:	3 months
		Review group:	TBD
		Focussed consultation:	Yes
		Publication date of the Opinion:	2015/Q3
		Publication date of the Decision:	2016/Q4

1. Issue and reasoning for regulatory change

Regulation (EC) No 1108/2009¹, amending Regulation (EC) No 216/2008, was adopted by the European co-legislators in order to cover the safety regulation of ATM/ANS (and aerodromes) by the European aviation safety regulatory system (hereinafter referred to as the EASA system). The implementation of the amended Basic Regulation requires the Agency to execute certain regulatory tasks. With the publication of NPA 2013-08 on 'Requirements for ATM/ANS providers and the safety oversight thereof', a significant amount of the related essential requirements of the Basic Regulation will be implemented; the essential requirements though of paragraph 2 (i.e. Services) of Annex Vb are only partially covered. These essential requirements include aeronautical information and data services as well as 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. In order to implement the essential requirements of paragraph 2(a) of Annex Vb related to the provision of data for air navigation², the Agency has to draft implementing measures (e.g. draft Implementing Rules (IRs)) and associated Acceptable Means of Compliance (AMC) and Guidance Material (GM) to the *technical requirements and operational procedures for the provision of data for airspace users for the purpose of air navigation*.

When developing the implementing measures consideration should be given to the EASA Opinion 01/2005 on the Acceptance of Navigation Database Suppliers and to the current FAA AC20-153A. In order to ensure continuity with the current best practice, the basis of the voluntary audit system established by the above-mentioned Opinion and the issue of an LoA will be integrated within the EASA certification scheme of ATM/ANS providers in accordance with Article 8b of the Basic Regulation. Since data service providers will be certified as ATM/ANS providers, the responsibility of operators can be alleviated.

Considering that the provision of data for airspace users for the purpose of air navigation is inherently global in scale, the development of the subject implementing measures should be coordinated and harmonised with the FAA, CASA Australia and other authorities in order to develop globally harmonised regulatory framework covering the data supply chain for avionics and data source integration.

Taking into account the EU initiatives and the Commission's letter dated 8 October 2012 addressing the development of the related rules, safety requirements are necessary to be developed in order to meet the Basic Regulation's safety objectives as well as the SES objectives. Therefore, where necessary, the rules should utilise a dual legal basis. In addition to that, consideration should be given to the work already done by EUROCONTROL with regard to the terminated ADQ2 mandate, as a necessary enabler to support the mandate to EUROCONTROL to assist the European Commission in the development of an interoperability implementing rule on Performance-Based Navigation (PBN).

2. Objectives

The *overall* objectives of the Agency are established by Article 2 of the Basic Regulation. An additional objective, in the fields covered by this Regulation, is 'to promote cost-

¹ Regulation (EC) No 1108/2009 of the European Parliament and of the Council of 21 October 2009 amending Regulation (EC) No 216/2008 in the field of aerodromes, air traffic management and air navigation services and repealing Directive 2006/23/EC (OJ L 309, 24.11.2009, p. 51).

² NB: Air navigation includes communications (i.e. DLS), airborne safety nets (i.e. TAWS), and EFB (i.e. airport moving map applications) as well.

efficiency in the regulatory and certification processes and to avoid duplication at national and European level' (Article 2.2(c)).

Hence, the specific objectives are:

- (a) to develop the specific organisational requirements and responsibilities applicable to data service providers and associated technical requirements for the provision of data services;
- (b) to avoid double oversight of these service providers by the competent authority and by the operators contracting their services;
- (c) to ensure that the SES objectives on interoperability with respect to data are achieved.

3. Activities

During the development of the draft rules a matrix will be developed stating the source and justification of each regulatory provision, which will include any cross reference to the essential requirements of the Basic Regulation, to applicable Union legislation, and to ICAO SARPs or recognised global industry standards and/or their adoption as European standards according to the Vienna Agreement³.

4. Deliverables

- Publication of a Notice of Proposed Amendment (NPA);
- publication of a Comment-Response Document (CRD) and Opinion;
- following the adoption of the Opinion by the Commission, adoption of the ED Decision with AMC/GM material.

NPA 2013-08 on 'Requirements for ATM/ANS providers and the safety oversight thereof' provides the general requirements for all ATM/ANS providers, including data service providers. An annex has been reserved to address the specific requirements to be complied with by DAT service providers⁴ in addition to the general ones. The deliverables should contain implementing measures (IRs, AMC/GM, as applicable) on:

- the specific **requirements for the competent authorities** with respect to the DAT service providers' oversight, as applicable;
- the **specific organisational requirements for the data service providers (DAT.OR)**, and the particular roles and responsibilities of such providers in order to ensure the necessary integrity, quality and timeliness of navigation data;
- the **technical requirements (DAT.TR) for the provision of data services** consisting in the origination and processing of data and formatting and delivering data to general air traffic. These technical requirements (DAT.TR) shall address the essential requirements set out in paragraph 2(a) of Annex Vb to the Basic Regulation and shall meet the SES objectives on interoperability;
- the **amendment to the air operations rule contained in CAT.IDE.A.355 and NCC.IDE.A.260** on electronic navigation data management of Regulation (EU)

³ Agreement on technical cooperation between ISO and CEN (Vienna Agreement), Version 2001.

⁴ DAT provider means a provider of data to general air traffic for the purpose of safety-critical air navigation.

No 965/2012⁵ and their extension to helicopter operations. Related AMC and GM should be reviewed as well.

A full Regulatory Impact Assessment (RIA) on the extension of the Agency's remit to ATM/ANS has been published with Opinion No 01/2008. However, it will be necessary to evaluate the impact of the regulatory solutions envisaged within the development of the Implementing Rules, particularly when some options are proposed during the drafting of the implementing measures. The impact of the proposed regulatory solutions will be assessed by means of an associated RIA which will be part of the NPA and of the Opinion in question.

5. Interface issues

The provision of data services consists in the origination and processing of data and formatting and delivering data to general air traffic. Those data service providers which originate data would need to comply with certain specific requirements; therefore, necessary provisions need to be developed, or links to the service providers (which are also data originators) should be ensured.

The technical requirements (DAT.TR) shall address the essential requirements set out in paragraph 2(a) of Annex Vb to the Basic Regulation and the SES objectives on interoperability. For this purpose recognised global industry standards and/ or their adoption as European standards according to the Vienna Agreement may be taken into account for the demonstration of compliance and any possible improvements could be proposed. In this respect the main focus should be on the ISO 9000 family of standards and the EUROCAE standards for processing aeronautical data (ED-76).

Furthermore, the necessary operational interface with the aeronautical information service (AIS) providers (see rulemaking task RMT.0477 & RMT.0478) needs to be defined, as well as the operational interfaces with the data end users as appropriate. Therefore, in order to ensure seamless data supply chain, close coordination should be established on activities related to RMT.0477 & RMT.0478 (Technical requirements and operational procedures for aeronautical information services (AIS) and aeronautical information management (AIM)), as appropriate.

To achieve the interoperability objectives of aeronautical information of sufficient quality in the aeronautical data chain from post-publication by the Aeronautical Information Service (AIS) to the end user, the implementing measures concerning requirements and operational procedures for the provision of data for airspace users for the purpose of air navigation shall complement or amend Commission Regulation (EU) No 73/2010 laying down requirements on the quality of aeronautical data and aeronautical information for the single European sky⁶. These requirements should seek to improve the scope, capability, robustness, performance and reliability of data-driven aviation operations on the subject part of the data supply chain.

The provision of high integrity and quality data for navigation is also necessary to enable safe PBN operations. Currently, CAT.IDE.355(c) and NCC.IDE.A.260(c) require the operator to 'continuous monitor the integrity of both the process and the products, either directly or by monitoring the compliance of third party providers'. Individual monitoring by each operator is highly inefficient, and the certification of data service providers is a key enabler for broader adoption of PBN operations with a high and uniform level of safety.

⁵ 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).

⁶ OJ L 23, 27.1.2010, p. 6.

6. Focussed consultation

Focussed consultation, depending upon the comments received, may include:

- technical workshops,
- RAG/TAGs and SSCC consultations (written or meetings, including thematic ones),
- review group.

7. Profile and contribution of the rulemaking group

The rulemaking group will work on the scope of the tasks as detailed in Sections 4 and 5. The Agency estimates up to six meetings before issuing the NPA.

Profile of the potential rulemaking group and its members:

- Individual expertise is required in the field of data service provision (i.e. processing and formatting of aeronautical data), aeronautical information services and interoperability with skills on the role and function of data service providers as well as their relationships and interactions with others within the data chain and knowledge of quality standards and processes.
- Both expertise and experience must cover data service provision, aeronautical information services, ensuring interoperability, including oversight of the above-mentioned aspects.

8. Annex I: Reference documents

8.1. Affected regulations

- Commission Implementing Regulation (EU) No 1034/2011 of 17 October 2011 on safety oversight in air traffic management and air navigation services and amending Regulation (EU) No 691/2010 (OJ L 271, 18.10.2011, p. 15)
- Commission Implementing Regulation (EU) No 1035/2011 of 17 October 2011 laying down common requirements for the provision of air navigation services and amending Regulations (EC) No 482/2008 and (EU) No 691/2010 (OJ L 271, 18.10.2011, p. 23)
- Commission Regulation (EU) No 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)

8.2. Affected decisions

- Opinion No 1/2005 of the EASA on the acceptance of Navigation Database Suppliers, resulting from the notice of proposed amendment (NPA) No 3/2004 on guidance material for the certification of production organisations ('GM to Part 21')
- Decision 2012/018/R of the Executive Director of the Agency of 24 October 2012 on acceptable means of compliance and guidance material to Commission Regulation (EU) No 965/2012 of 5 October 2012 — Acceptable Means of compliance and Guidance Material to Part-CAT (OPS - Annex IV)
- Decision 2013/021/R of the Executive Director of the Agency of 23 August 2013 on adopting acceptable means of compliance and guidance material to Commission Regulation (EU) No 965/2012 of 5 October 2012 — Acceptable Means of compliance and Guidance Material to Part-NCC (OPS — Annex VI)

8.3. Reference documents

- 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), as last amended by Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009 (OJ L 300, 14.11.2009, p. 34)
- 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), as last amended by Regulation (EC) No 1070/2009 of the European Parliament and of the Council of 21 October 2009 (OJ L 300, 14.11.2009, p. 34)
- 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)
- 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, as last amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 (OJ L 4, 9.1.2013, p. 34)
- 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)

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- Commission Implementing Regulation (EU) No 1034/2011 of 17 October 2011 on safety oversight in air traffic management and air navigation services and amending Regulation (EU) No 691/2010 (OJ L 271, 18.10.2011, p. 15)
 - Commission Implementing Regulation (EU) No 1035/2011 of 17 October 2011 laying down common requirements for the provision of air navigation services and amending Regulations (EC) No 482/2008 and (EU) No 691/2010 (OJ L 271, 18.10.2011, p. 23)
 - Commission 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 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)
 - NPA 2013-08 'Requirements for ATM/ANS providers and the safety oversight thereof'
 - EASA Opinion No 1/2008 'Extension of the EASA system to the regulation of Air Traffic Management and Air Navigation Services (ATM/ANS)'
 - ICAO Annex 4 — Aeronautical charts
 - ICAO Annex 15 — Aeronautical Information Services
 - ICAO Doc 8126 — Aeronautical Information Services Manual
 - ICAO Doc 8697 — Aeronautical Chart Manual
 - ICAO Doc 8168 — PANS Aircraft Operations
 - EUROCAE ED-76 — Standards for Processing Aeronautical Data
 - EUROCAE ED-77 — Standards for Aeronautical Information
 - FAA AC20-DB — Acceptance of Data Processes and Associated Navigation Databases
 - Aeronautical Radio Inc. ARINC 424 — Navigation System Data Base