



Terms of Reference for rulemaking task RMT.0524

Data link services

ISSUE 1

Issue/rationale

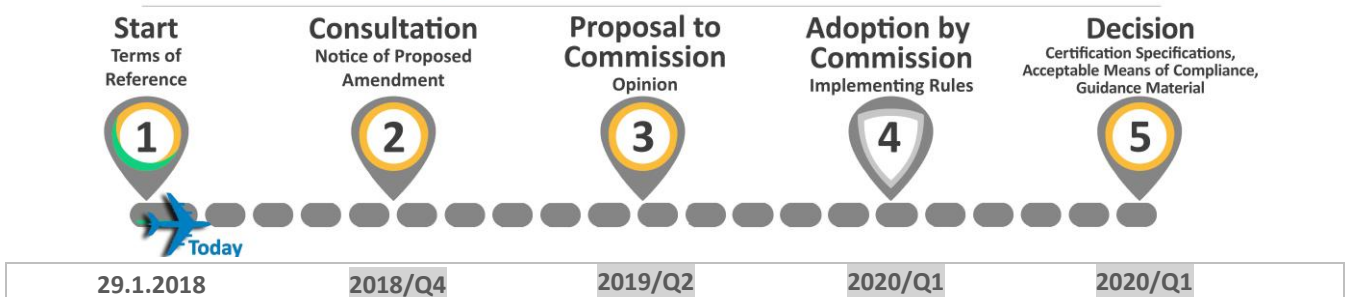
The European Aviation Safety Agency’s (EASA) analysis of the technical issues observed during the deployment of Regulation (EC) No 29/2009 resulted in various recommendations which were further considered during the data link services (DLS) extensive review and testing conducted by Sesar Joint Undertaking (SJU). The resulting report, known as Enhance Large Scale ATN deployment (ELSA) report, included additional recommendations, some being regulatory in nature. Based on those recommendations and as requested by the European Commission, this rulemaking task (RMT) will address these regulatory recommendations to support the datalink operations as required by Regulation (EC) No 29/2009. It will also determine the regulatory needs to support the ELSA Model D multi-frequency implementation, the identification and development of an ‘end-to-end certification/validation’ framework and the clarification of the notion of ‘best in class’ performance and the related avionics improvements.

Furthermore, to improve the predictability of the aircraft trajectory leading to less tactical interventions and improved deconfliction, this RMT addresses elements of the ‘Pilot Common Project’ (PCP) air traffic management (ATM) functionality 6 requirements (‘Initial Trajectory Information Sharing’) and, in particular, the requirements necessary to implement ‘Extended Projected Profile’ (EPP). This RMT may also consider providing the requirements for various other applications related to the extended data link operations.

This RMT also addresses as a separate topic in the domain of ‘Air Operations’ (Regulation (EU) No 965/2012, the ‘Air OPS Regulation’), the implementation of performance-based communication and surveillance (PBCS) to support North Atlantic operations.

Action area:	PCP SESAR deployment		
Affected rules:	<ul style="list-style-type: none"> — Regulation (EC) No 29/2009, Regulation (EU) No 965/2012, Regulation (EU) 2017/373; — CS-ACNS, CS-ETSO, CS-MMEL; — AMC/GM to all Annexes to Regulation (EU) No 965/2012; — AMC/GM to AUR; — AMC/GM to PART-ATM/ANS.OR and to PART-ATM/ANS.AR 		
Affected stakeholders:	Air navigation service providers (ANSPs), communication service providers (CSPs), aircraft operators, aircraft and equipment manufacturers, Member States (MSs)		
Driver:	Efficiency/Proportionality	Rulemaking group:	Yes, but not for Air OPS PBCS
Impact assessment:	Full	Rulemaking Procedure:	Standard

• EASA rulemaking process milestones



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

- To address Regulation (EC) No 29/2009¹ (the ‘DLS Regulation’) implementation issues

The DLS Regulation details the requirements for a coordinated introduction of data link services (DLS) into flight-data-processing systems (FDPs), human-machine interface (HMI), air-ground communication systems, their parts, constituents and procedures, as well as into affected flights and air traffic service (ATS) providers.

The intent of the DLS Regulation is to enable the provision of additional air traffic control capacity in order to sustain an expected increase in air traffic within Europe. As the voice communication channels were becoming progressively congested, the communication between pilots and air traffic controllers (ATCOs) needed to be supplemented by air-ground data link communications.

However, during the DLS Regulation implementation, air navigation services (ANS) and aircraft operators reported technical issues, in particular Controller Pilot Data Link Communications (CPDLC) disconnections, known as provider aborts (PAs), which were beyond that required for acceptable performance. The excessive PAs rate caused a degradation of network performance increasing the pilots and ATCOs’ workload, which may have a potential safety impact.

The European Commission requested EASA to investigate the root cause of the technical issues. This investigation revealed that the PA occurrences could be attributed to a combination of factors related to the radio frequency environment and the use of a single-frequency implementation.

In April 2014, EASA issued a report² proposing 10 actions and recommendations for further investigations. Furthermore, in order to address the immediate safety aspects of the DLS operations, EASA issued Safety Information Bulletin (SIB) No 2014-14³, which recommends that operators revert from data to voice radio communication when confronted with a high level of PAs.

Based on the EASA report recommendations, the European Commission instructed the Single European Sky ATM Research (SESAR) Joint Undertaking (SJU) to further investigate the issues. The ELSA Consortium was thus commissioned by SJU to assume this responsibility and propose technical solutions to address both the ground infrastructure and the airborne issues. The ELSA report⁴, issued in June 2016, contains various recommendations, some requiring regulatory action.

On 24 November 2016, the European Commission organised a DLS-COM workshop to further discuss the ELSA recommendations and the associated SESAR deployment manager (SDM) DLS recovery plan. Various gaps (i.e. functions to be fulfilled or actions to be completed) were identified during the workshop. Building on the outcome of this DLS-COM workshop, the European Commission requested EASA to take specific action, including the launch of the RMT.0524 on DLS. RMT.0524 will propose the regulatory requirements for the implementation of

¹ Commission Regulation (EC) No 29/2009 of 16 January 2009 laying down requirements on data link services for the single European sky (OJ L13, 17.1.2009, p.3) (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:013:0003:0019:EN:PDF>).

² https://ec.europa.eu/transport/sites/transport/files/modes/air/single_european_sky/doc/implementing_rules/2014-04-23-easa-datalink-report.pdf

³ <https://ad.easa.europa.eu/ad/2014-14>

⁴ <https://www.sesarju.eu/newsroom/brochures-publications/vdlm2-%E2%80%93-measurements-analysis-and-simulation-campaign-elsa-study>



multi-frequency DLS on the basis of Model D (as per the ELSA study), provide the specific requirements for end-to-end certification and oversight function and the characterisation of the 'best in class' performance, as well as the implementation of the related avionics improvements. In addition to SDM and EASA's tasks, the Network Manager (NM) and EUROCAE have been tasked by the Commission with specific complimentary actions (e.g. network performance monitoring and the development of ED-92C on minimum operational performance specification for the VDL Mode-2 for airborne systems, respectively).

While it is intended to provide a characterisation of 'best in class' performance, the use of this terminology is controversial and should be limited. The outcome of this RMT should address this issue and link aircraft certification to specific standards. RMT.0524 may not necessarily be limited to these specific activities and may take into account, for example, the concerns reported by non-AOC (airline operational communication) traffic operators. This RMT should analyse and propose a set of DLS performance indicators as well as means to ensure an appropriate performance monitoring function. The introduction of the appropriate standards and their revisions along with their impact will also be assessed under this RMT.

Based on the resolution of the aforementioned implementation issues, the applicability of the DLS regulation, the criteria for automatic exemptions, as well as the exemption criteria of Article 14 of the DLS regulation may be reassessed. RMT.0524 will take into account the previous European Commission's decisions on exemptions, any amendments to the DLS regulation, stemming from the short-term review thereof, as well as the objectives set by the future European communication navigation surveillance (CNS) vision initiative. If needed and based on the resolution of various implementation issues (e.g. non-AOC traffic), changes to the exemptions may be proposed. The analysis of these issues will be supported by an appropriate impact assessment (IA).

- To take into consideration the EASA Safety Recommendations (SRs)/Safety Information Bulletins (SIBs)

Although no specific SRs on this topic have been addressed to EASA, any new SRs related to this RMT may be considered after publication of this ToR. Additionally, the following SIBs, as detailed below, may be taken into account during the development of the regulatory proposals of this RMT.

EASA SIB No 2014-14⁵ 'Controller Pilot Data Link Communications over Very High Frequency Data Link Mode 2 (CPDLC over VDL Mode 2)' was issued on 23 May 2014. The SIB defines the issue of PAs, their potential effect on the aircrew workload and the subsequent frequency congestion. The SIB provides the following recommendation for operators:

- *Operators should ensure that their operational procedures for interruptions of CPDLC over VDL Mode 2 sessions (also commonly referred to as "provider aborts") to prescribe reversion to voice radio communications only and reconnection of the CPDLC over VDL Mode 2 session only at the next regularly planned connection which in many cases is at the next flight. Operators should base their operational procedures and training covering CPDLC VDL Mode 2 operations on the Guidance provided in ICAO Global Operational Data Link Document*

⁵ <https://ad.easa.europa.eu/ad/2014-14>



(GOLD) 2nd Edition, dated 26 April 2013. Operators and Flight Crews should report all occurrences related to interruptions of CPDLC over VDL Mode 2 sessions [...].

EASA SIB No 2014-15⁶ ‘Controller Pilot Data Link Communications (CPDLC) — Data Link: Instruction to turn a specified number of degrees left or right (UM 215)’ was issued in May 2014. The SIB defines the problem of misinterpreting the instruction of UM215 and its potential consequences. The SIB provides the following recommendation for ANSPs and operators:

- *Air Navigation Service Providers should consider that some avionics display the number of degrees to turn in UM 215 in a way different from standard ICAO phraseology, and therefore aircraft could react in a manner different from the instructed intent. Operators should consider in the training of the flight crews and in their operational procedures that some avionics display the number of degrees to turn in UM 215 in a way different from standard ICAO phraseology.*

- To provide regulatory support for the ‘Initial Trajectory Information Sharing’ solution

Initial trajectory information sharing has been developed within the SESAR programme. Trajectory sharing requires the airborne trajectory prediction made by the flight management systems (FMS) to be shared with the ground systems. The airborne prediction takes into account flight performance data that is updated in real time, such as descent-planning information, aircraft weight, and the most updated temperature and wind predictions and it is therefore more accurate than any ground based predictions.

Data link is an essential prerequisite to business trajectory based operations (initial (i) 4D and full 4D operations), which is the backbone of the SESAR operational concept. Without a properly functioning data link system, the achievement of the single European sky (SES) high-level goals is likely to be jeopardised. The overall goal of these operations is to improve the predictability of the aircraft trajectory, which will lead to less tactical interventions and improved deconfliction.

Regulation (EU) No 716/2014⁷ (the ‘PCP Regulation’), reflects the need for the implementation of the EPP trajectory information feature, as part of i4D. RMT.0524 will review the PCP ATM functionality 6 and propose the regulatory requirements of the various stakeholders to downlink EPP trajectory information (which is one of the ATN B2 services). Other DLS-related applications may be considered, as necessary.

The resolution of the observed implementation issues, and the EPP introduction, may determine the need to define performance requirements in the revised DLS regulation. Such objectives may take into consideration the principles of PBCS.

- To review the latest International Civil Aviation Organization (ICAO) amendments

The relevant ICAO amendments that impact data link operations will be assessed as part of this RMT, and a proposal will be made to either keep, remove or change the ICAO amendments references in the future revised DLS Regulation. The review of the ICAO amendments was

⁶ <https://ad.easa.europa.eu/ad/2014-15>

⁷ 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 Management Master Plan (OJ L 190, 28.6.2014, p.19) (http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2014.190.01.0019.01.ENG).



initiated during the short-term review of the DLS Regulation; however, such an assessment needs to be completed as part of this RMT.

- To take into consideration the various risks for the DLS operations, including the cybersecurity risk.

This RMT may assess various risks affecting the DLS operations, in particular cybersecurity risks, and may propose mitigation measures.

- To support the implementation of PBCS and PBCS separation minima in the North Atlantic (NAT) airspace in the Air OPS context

ICAO State Letter EUR/NAT 16-0349.TEC (NAE/DAC) of 18 July 2016 informed the Contracting States about the plan to implement PBCS/Performance Based Navigation (PBN)-based separation minima in the NAT Region on 29 March 2018, and requested them to take appropriate measures to develop, establish, and implement necessary policies and procedures in order to ensure that their operators conducting flights in the NAT Region are compliant with the new PBCS requirements. PBCS requirements provide for required communication performance (RCP) 240 and required surveillance performance (RSP) 180 for communication and surveillance capabilities supporting the application of performance-based horizontal separation minima. Monitoring programmes have been conducted by NAT ANSPs for several years, effectively measuring CPDLC and automatic dependent surveillance-contract (ADS-C) performance against RCP 240 and RSP 180 in continued operations.

ICAO Annex 6 'Operation of Aircraft' contains provisions on PBCS, which are necessary for the implementation of the above-mentioned separation minima, if needed. Detailed guidance for Contracting States and operators has been developed and made available in the ICAO Doc 9869 'Performance-based Communication and Surveillance (PBCS) Manual', which covers implementation and approval aspects of PBCS.

It is necessary to assess the content of the aforementioned documents and revise accordingly the related requirements of the Air OPS Regulation⁸ to enable MSs and airspace users to discharge their responsibilities described in the appropriate ICAO SARPs for PBCS and the use of the NAT airspace.

It should be noted that the Air OPS-related issues can be evaluated independently of the other issues in this ToR. The AIR OPS deliverables will be independent from the rest of the RMT.0524 deliverables with a separate timeline.

2. What we want to achieve — objective

The objective of RMT.0524 is to ensure that the operational improvements associated with the safety and efficiency of communication between controllers and pilots via data link are met.

To achieve this, the current DLS implementation issues need to be addressed. This RMT should therefore ensure a continued, safe and efficient implementation of services required by the DLS Regulation.

⁸ 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. 10 (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1505901852382&uri=CELEX:32012R0965>)).



Furthermore, this RMT intends to support an operating environment with less tactical interventions, by supporting the introduction of the EPP, part of the PCP ATM functionality 6 requirements.

In addition, this RMT should support the EASA MS operators and MSs in the PBCS implementation, initially in the NAT airspace. More specifically, this RMT should:

- enable MSs and operators to comply with the applicable requirements on PBCS and separation minima in the NAT airspace; and
- allow operators to take benefit from a more efficient use of said airspace.

3. How we want to achieve it

In order to ensure a continued, safe and efficient implementation of the DLS regulation, this RMT will focus on the following three points:

- provision of the regulatory framework to support the ELSA Model D implementation;
- definition of an 'end-to-end certification/validation' framework for DLS; and
- clarification of the data link standards and operational performance and monitoring criteria to achieve an adequate level of DLS performance; including those avionics referred to in various documentations as the 'best in class'.

This task will also consider extending the application of the RCP framework for the European airspace, since this is relevant to the aforementioned points and linked with the PCBS implementation within NAT airspace. These points may be complemented as necessary if other issues are identified.

Coordination with various other organisations (e.g. SDM, EUROCAE, Eurocontrol-NM) is needed, to ensure the resulting actions are aligned.

More specifically, during the development of the proposal to amend the DLS Regulation and the associated certification specifications (CSs) and means of compliance (AMC), to achieve the points mentioned above, the following activities may be conducted:

- review of the ELSA report, EASA DLS report, SDM DLS recovery plan and other relevant reports; taking into account the recommendations stemming from all those reports;
- review of the structure of the current DLS regulation, also taking into account other implementing rules (IRs);
- review of the relevant EASA documentation (e.g. CS-ETSO, CS-ACNS, CS-MMEL and SIBs, as appropriate) and other documentation, as necessary;
- review of flight crew operational procedures, training requirements relevant to data link operations, and the relevant parts of the syllabus and/or learning objectives on data link operations related to the European central question bank (ECQB), as necessary;
- review of the latest ICAO amendments in particular Annex 10 technical requirements and RCP operational requirements and assessment of their introduction into the EASA regulatory framework, as needed: even if the review of the ICAO SARPs is generally considered to be part of the 'regular updates' RMTs;



- development of a regulatory impact assessment (RIA) showing the links between drivers, issues and consequences⁹
- risks to DLS operations (including the cyber security risks) and possible mitigation measures should be assessed.

In order to ensure that the regulatory framework appropriately supports the implementation and operations of i4D, as required by the PCP Regulation, the relevant standards allowing the downlink of the data, based on the airborne trajectory prediction using the EPP, should be reviewed. The certification documentation and means of compliance should be prepared or updated, as applicable. More specifically, the following activities should be performed:

- review and amend the relevant airborne standards in order to update the CSs, so that the the avionics systems are able to provide EPP on ground; and
- review and amend of the relevant ATM/ANS provisions, to support the implementation of the enhanced DLS ATN B2 standard, as well as to support air-Ground exchanges in order to receive EPP data.

Furthermore, the proposals stemming from above will take into considerations the establishment of performance objectives and operational incentives and/or penalties into the regulatory framework.

With regard to the Air OPS PBCS implementation issue, for the initial application in NAT airspace, this RMT will review the current Air OPS Regulation requirements for communication and surveillance equipment and special approvals for minimum navigation performance specification (MNPS) operations. Such review and the resulting rule text may be subject to a separate consultation process, while no RMG will be created specifically for this topic.

4. What are the deliverables

An RMG will be created for RMT.0524, except when dealing with the Air Ops PBCS topic, as explained above. While only the final deliverables are listed below, the associated intermediate deliverables are the relevant NPAs and the corresponding comment response documents (CRDs).

The following final deliverables may be issued:

- an opinion proposing to amend the DLS Regulation;
- an opinion proposing to amend the proposed¹⁰ Commission Regulation (EU) .../of [...], laying down common airspace usage requirements and operating procedures, which would repeal the regulation (EU) No 1332/2011¹¹;
- an opinion proposing to amend the Regulation (EU) 2017/373¹²

⁹ This activity would benefit from the input of various stakeholders. During the development of the RIA, stakeholders' consultation may include inputs from the rulemaking group (RMG) members, surveys or targeted meetings. The details and content of the surveys as well as their target group (e.g. airspace users, ground equipment manufacturers, and ANSPs) will be discussed with the RMG members.

¹⁰ <https://www.easa.europa.eu/document-library/opinions/opinion-102016>

¹¹ 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) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1505901156766&uri=CELEX:32011R1332>).

¹² 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

- a decision amending Decision 2013/031/R (CS-ACNS);
- a decision amending Decision 2003/10/RM (CS-ETSO);
- a decision amending Decision 2014/004/R (CS-MMEL);
- a decision amending Decision 2012/002/R (AMC/GM to Part-AUR); and
- a decision amending Decision 2017/001/R (AMC/GM to Part-ATM/ANS.OR and Part-ATM/ANS.AR).

Additional regulations and decisions that may be impacted and need to be amended will be identified during this RMT. Proposals for amendment may be included in this RMT or additional RMTs may be initiated, as appropriate.

For the Air OPS PBCS specific topic of this RMT, the following EASA deliverables are expected:

- an opinion proposing to amend the Air OPS Regulation;
- a decision amending Decision 2012/015/R (GM to Annex I — Definitions);
- a decision amending Decision 2014/025/R (AMC/GM to Part-ARO — Issue 3);
- a decision amending Decision 2014/017/R (AMC/GM to Part-ORO — Issue 2);
- a decision amending Decision 2014/015/R (AMC/GM to Part-CAT — Issue 2’);
- a decision amending Decision 2012/019/R (AMC/GM to Part-SPA).
- a decision amending Decision 2013/021/R (AMC/GM to Part-NCC);
- a decision amending Decision 2014/016/R (AMC/GM to Part-NCO — Issue 2); and
- a decision amending Decision 2014/018/R (AMC/GM to Part-SPO).

5. How we consult

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

- meetings with stakeholders;
- workshops;
- conferences (including teleconferences); and
- meetings with the Member States’ Advisory Body (MAB), Stakeholders’ Advisory Body (SAB), Technical Bodies (TeBs), and Stakeholders’ Technical Bodies (TECs).

6. Interface issues

To support the specific objectives of this RMT relating to the creation of an ‘end-to-end certification’ regulatory framework, this RMT may trigger the initiation of RMT.0161 on ‘Conformity assessment’.

Regulation (EC) No482/2008, Implementing Regulations (EU) No1034/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011 (OJ L 62, 8.3.2017, p.1) (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0373&from=EN>).



The draft proposals will take into due consideration the requirements of the following documents:

- the PCP Regulation;
- Regulation (EU) No 390/2013¹³;
- Regulation (EU) No 923/2012¹⁴

7. Profile and contribution of the rulemaking group

An RMG will be established to support EASA with this RMT. The established RMG will support EASA during the initial drafting phase of the NPA, and may support in the review of comments received during the NPA public consultation as well as of other documentation, as necessary.

The RMG should:

- be composed of sufficient number of experts representing competent authorities (CAs), ANSPs, commercial and non-commercial aircraft operators, military organisations, ground and aircraft system manufactures, Network Manager; and
- hold six to eight meetings between 2018/Q1 and 2018/Q4, complemented by teleconferences, as needed

The RMG members should have knowledge of and experience in designing and validating ground or airborne data link systems and the operations thereof. Experience in regulatory activities, policy making or standards development at national and/or international level would be advantageous.

Note: Additional stakeholders from CSPs, SDM, EUROCAE, ETSI may be invited to support the activities of the RMG as needed.

8. Reference documents

8.1. Affected regulations

- 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) .../of [...], laying down common airspace usage requirements and operating procedures¹⁵
- 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)

¹³ Commission Implementing Regulation (EU) No 390/2013 of 3 May 2013 laying down a performance scheme for air navigation services and network functions (OJ L 128, 9.5.2013, p. 1) (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:128:0001:0030:EN:PDF>).

¹⁴ Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (OJ L 281, 13.10.2012, p.1) (<http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1442321071683&uri=CELEX:02012R0923-20150630>)

¹⁵ <https://www.easa.europa.eu/document-library/opinions/opinion-102016>



- 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

- Decision 2013/031/R of the Executive Director of the Agency of 17 December 2013 adopting Certification Specifications for Airborne Communications Navigation and Surveillance (CS ACNS) CS-ACNS Initial Issue;
- 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 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'; and
- Decision 2017/001/R of the Executive Director of Agency 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'.

For the Air OPS PBCS specific topic of this RMT, the decisions expected to be affected are the following:

- 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'; and
- 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'.

Additional regulations and decisions that may be impacted and require amendment should be identified during this RMT. Proposals for amendment may be included in this RMT or additional RMTs may be initiated, as appropriate.

8.3. Reference documents (non-exhaustive list)

- Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1)
- Regulation (EC) No 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)
- 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 framework Regulation) (OJ L 096, 31.3.2004, p.26)
- Commission Implementing Regulation (EU) No 390/2013 of 3 May 2013 laying down a performance scheme for air navigation services and network functions (OJ L 128, 9.5.2013, p. 1)
- Commission Regulation (EC) No 677/2011 of 7 July 2011 laying down detailed rules for the implementation of air traffic management (ATM) network functions and amending Regulation (EC) No 691/2010 (OJ L 185, 15.7.2011, p. 1)
- Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC)



No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (OJ L 281, 13.10.2012, p.1)

- Commission Implementing Regulation (EU) 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)
- Commission Implementing Regulation (EU) No 1079/2012 of 16 November 2012 laying down requirements for voice channel spacing for the single European sky (OJ L320, 17.11.2012, p.14)
- Commission Regulation (EC) No 30/2009 of 16 January 2009 amending Regulation (EC) No 1032/2006 as far as the requirements for automatic systems for the exchange of flight data supporting data link services are concerned (OJ L 13, 17.1.2009, p. 20)
- ICAO Annex 10 to the Convention on International Civil Aviation, Aeronautical Telecommunications, Volume II — Communication Procedures including those with PANS status, 7th Edition, July 2016
- ICAO Annex 10 to the Convention on International Civil Aviation, Aeronautical Telecommunications, Volume III — Communication Systems, 2nd Edition, July 2007
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