

### **European Aviation Safety Agency**

# **Explanatory Note to Decision 2015/028/R**

Maintenance of the acceptable means of compliance and guidance material on the safety (key) performance indicator 'Use of risk analysis tool' for the air traffic management performance scheme

RELATED NPA/CRD 2015-16 — RMT.0692 — 17.12.2015

#### **Executive Summary**

This Decision addresses a regulatory coordination issue related to changes to the risk analysis tool (RAT) guidance and to the definitions developed by the RAT user group (UG).

The RAT methodology has been developed by Eurocontrol and it serves to assign severity levels to reported air traffic management (ATM) incidents. The relevant EASA acceptable means of compliance (AMC) and guidance material (GM) take into account the RAT methodology in order to harmonise the severity classification applied when reporting occurrences.

The air traffic management (ATM/air navigation services (ANS) thematic advisory group (TAG) identified an issue because of changes to the RAT guidance and definitions, and encouraged EASA to amend its AMC and GM accordingly.

The specific objective of this Decision is to amend the AMC/GM annexed to ED Decision 2014/035/R in order to avoid inconsistencies that may prevent stakeholders from meeting the agreed targets of the ATM performance scheme. Other relevant feedback provided by the TAG has been also been addressed.

Main changes of this AMC and GM are meant to clarify and improve the guidance on severity classification of ATM operational occurrences (SMIs and RIs) and ATM-specific occurrences using the RAT methodology in accordance with the provisions of the performance scheme Regulation. In addition, it introduces the ATM-specific occurrences applicable only to the Network Manager.

Applicability		Process map	
Affected	ED Decision 2014/035/R 'AMC & GM for the	Concept Paper:	No
regulations and decisions:	implementation and measurement of safety (Key) Performance Indicators (S(K)PIs)'	Rulemaking group:	No
		Terms of Reference:	23.10.2015
Affected stakeholders:	air navigation service providers (ANSPs); competent authorities	RIA type:	Light
		Technical consultation	
		during NPA drafting:	No
Driver/origin:	Efficiency/proportionality	Publication date of the NPA:	29.10.2015
Reference:	1-2015 ATM/ANS TAG meeting of April 2015; Performance Review Body meeting of June 2015	Duration of NPA consultation:	4 weeks
		Review group:	No
		Focused consultation:	No
		Publication date of the Decision:	2015/Q4



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#### 1. Procedural information

#### 1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed this Decision in line with Regulation (EC) No 216/2008<sup>1</sup> (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure<sup>2</sup>.

This rulemaking activity is included in the Agency's <u>4-year Rulemaking Programme</u> under RMT.0692. The scope and timescale of the task were defined in the related <u>terms of reference</u> (ToR).

The draft text of this Decision has been developed by the Agency based on the input of the ATM/ANS TAG. All interested parties were consulted through NPA 2015-16<sup>3</sup>. In total, 41 comments were received from interested parties, including industry (20 comments), national aviation authorities (18 comments) and social partners (3 comments).

The Agency has reviewed the comments received on the NPA. Whenever the comment was partially accepted, noted or not accepted, a rationale was providing. Out of the 41 comments, 5 were accepted, 15 not accepted, 12 partially accepted and 9 were noted. The comments received and the Agency's responses thereto are presented in comment-response document (CRD) 2015-16<sup>4</sup>.

The final text of this Decision with the AMC/GM has been developed by the Agency based on the input of the ATM/ANS TAG and having taken into consideration the outcome of the NPA's public consultation.

The process map on the title page contains the major milestones of this rulemaking activity to date and provides an outlook of the timescale of the next steps.

#### 1.2. Structure of the related documents

Chapter 1 contains the procedural information related to this task. Chapter 2 explains the core technical content. The text of the AMC/GM is annexed to the ED Decision.

<sup>4 &</sup>lt;u>http://www.easa.europa.eu/document-library/comment-response-documents</u>



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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).

The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See Management Board (MB) Decision 01-2012 of 13 March 2012 concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material.

<sup>&</sup>lt;sup>3</sup> In accordance with Article 52 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.

## 2. Explanatory Note

This Decision amends the AMC/GM annexed to ED Decision 2014/035/R<sup>5</sup>.

With Commission Implementing Regulation (EU) No 390/2013<sup>6</sup> (hereinafter referred to as the 'performance scheme Regulation'), the ATM performance scheme requires Member States (MS) and ANSPs to demonstrate that they meet the agreed EU targets that were published by the European Commission<sup>7</sup>. As regards safety, the way to achieve this is by means of safety (key) performance indicators (S(K)PIs).

RAT S(K)PI is one of these S(K)PIs. The RAT methodology has been developed by Eurocontrol and it serves to assign severity levels to reported ATM incidents. The Agency's relevant AMC/GM take into account the methodology used by RAT in order to harmonise the severity classification applied in occurrence reporting. The introduction of changes to the RAT guidance and definitions by the Eurocontrol RAT UG resulted in inconsistency between the Agency's AMC/GM and the RAT methodology. The ATM/ANS TAG indicated this inconsistency and encouraged the Agency to amend the related AMC/GM accordingly.

In addition to the changes to the RAT methodology, Regulation (EU) No 376/2014<sup>8</sup> applies from 15 November 2015. When Directive 2003/42/EC<sup>9</sup> was repealed by Regulation (EU) No 376/2014, changes were made to the occurrence reporting requirements. Therefore, the Agency proposes that, while updating the AMC/GM, the reference to Directive 2003/42/EC be replaced with a reference to Regulation (EU) No 376/2014.

#### 2.1. Overview of the issues to be addressed

The objective of this Decision is to update the Agency's AMC/GM on severity classification using the RAT methodology in order to stay aligned with the latest developments of the RAT UG. The proposed changes do not intend to modify the methodology and the related AMC, but to further explain the scoring criteria in order to achieve better harmonisation among users.

The Agency is also taking the opportunity to propose updates to AMC8 SKPI in order to replace the references to Directive 2003/42/EC on occurrence reporting with a reference to Regulation (EU)

Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation (OJ L 167, 4.7.2003, p. 23).



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Decision 2014/035/R of 16 December 2014 of the Executive Director of the Agency adopting Acceptable Means of Compliance and Guidance Material for point 1 of Section 2 of Annex I to Regulation (EU) No 390/2013 and repealing Decision 2011/017/R of the Executive Director of the Agency of 16 December 2011 — 'AMC and GM for the implementation and measurement of safety (Key) Performance Indicators (S(K)PIs)' — Issue 2.

<sup>&</sup>lt;sup>6</sup> 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).

<sup>&</sup>lt;sup>7</sup> 2014/132/EU: Commission Implementing Decision of 11 March 2014 setting the Union-wide targets for the air traffic management network and alert thresholds for the second reference period 2015-2019 (OJ L 71, 12.3.2014, p. 20).

Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (OJ L 122, 24.4.2014, p. 18).

No 376/2014. In the same section, the reference to Commission Regulation (EU) No 691/2010<sup>10</sup> is replaced with a reference to the performance scheme Regulation.

#### 2.2. Objectives

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Section 2.1.

The specific objective of this Decision is to amend the AMC/GM annexed to ED Decision 2014/035/R in order to rectify inconsistencies that may prevent stakeholders from meeting the agreed targets of the ATM performance scheme. Other relevant feedback which has been provided by stakeholders at the ATM/ANS TAG meeting in April 2015 have also been addressed.

#### 2.3. Outcome of the consultation

The outcome of the consultation of the proposal presented in NPA 2015-16 can be found in CRD 2015-16. The main aspects can be summarised as follows:

- Insertion of specific criteria for the Network Manager and associated definitions for severity classification of ATM-specific occurrences. A new look-up table has been created to take this new criterion into consideration.
- Several commentators have challenged the new entry criteria which is introduced in order to determine if an occurrence is subject to severity classification. More specifically, the commentators requested to remove the criteria used to classify the severity of occurrences that did not have consequences due to the particular context situation (e.g. low traffic) but that posed a risk to the operation. The Agency considered that this type of events should be always addressed and severity should be classified based on the actual risk posed and not only on the outcome that materialised at the time of the event due to contextual factors or even the providence, in order to assure the future safety of the system at hand.
- Inconsistencies of references and applicability of severity classification to separation minima infringement (SMI) and runway incursion (RI) have been identified as problematic and are clarified in the resulting text.
- The reference to 'intended separation' was identified as not adequate, and has been changed throughout the document to 'required separation'.
- Some commentators pointed out that there is no severity 'N' in the RAT methodology. Actually,
   'N' is not a severity category. This has been clarified in the responses to these comments.

Commission Regulation (EU) No 691/2010 of 29 July 2010 laying down a performance scheme for air navigation services and network functions and amending Regulation (EC) No 2096/2005 laying down common requirements for the provision of air navigation services (OJ L 201, 3.8.2010, p. 1).



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#### 2.4. Summary of the Regulatory Impact Assessment (RIA)

The RIA concluded that the proposed changes affect the severity classification. An analysis was performed to understand the effects of the proposed changes on severity classification and these were found to be minimal or having no impact in most cases.

#### 2.5. Overview of the amendments

The AMC/GM for S(K)PIs will be amended for the third time. As only one out of the three S(K)PIs is amended, only the affected AMCs/GMs are published. The objective of the proposed amendment is to clarify and improve the guidance on severity classification of ATM operational occurrences (SMIs and RIs) and ATM-specific occurrences using the RAT methodology in accordance with the provisions of the performance scheme Regulation. In addition, it introduces the ATM-specific occurrences applicable only to the Network Manager.

The proposed changes do not affect the scoring principles, but provide users with more granularity on the criteria that could only be beneficial for achieving harmonisation among them.

- Regarding the AMC/GM on the application of the RAT methodology to SMIs and RIs, the changes proposed are editorial refinements of the current wording and are designed to achieve a more harmonised scoring of those occurrences among users. The affected AMC/GM are:
  - **GM1 SKPI General:** A new set of definitions related to the Network Manager has been added and some minor editorials have been done.
  - AMC4 SKPI Severity classification based on the risk analysis tool methodology —
    General: It has been clarified in the text that two types of occurrences exist, i.e.
    operational and technical, and that their severity is classified in a slightly different manner.
  - AMC5 SKPI Severity classification based on the risk analysis tool methodology Methodology for Separation Minima Infringements: The term 'conflict' has been replaced by 'potential conflict'. The definitions of two possible scenarios regarding controllability have been corrected. Two new sections have been added, 'E' which contains ATM Ground performance criteria and the severity classification that applies to SMIs, and 'F' regarding to the severity classification scheme. The existing sections 'C' on final scores and 'D' on reliability factor have been moved from AMC6 to this AMC5.
  - GM8 SKPI Severity classification based on the risk analysis tool methodology —
     Methodology for Separation Minima Infringements Controllability score
     determination: The term 'separation' has been replaced by 'required standard
     separation'.
  - AMC6 SKPI Severity classification based on the risk analysis tool methodology —
     Methodology for Runway Incursions: Sections 'C' and 'D' have been moved to AMC5 and
     referred to them in this AMC6, as they apply to both separation minima infringements
     (SMIs) and runway incursions (RIs). References to the new sections 'E' and 'F' in the AMC5
     have also been added.
- Regarding the methodology for ATM-specific occurrences, the proposed changes are more fundamental (e.g. entry criteria for RAT assessment and the introduction of the ATM-specific occurrences applicable only to the Network Manager). The affected parts are:

# AMC7 SKPI Severity classification based on the risk analysis tool methodology — Methodology for ATM-specific occurrences

This AMC addresses the use of the RAT methodology for the severity assessment of reported occurrences. In this AMC, the entry criteria provide the process to be followed to distinguish between ATM-specific occurrences, and the cases where the RAT methodology should be applied or not depending on whether an operational function is affected.

This AMC includes the criteria to assign severity to ATM-specific occurrences relevant to the Network Manager. The modified look-up table including the Network Manager case with a combination of criteria and its severity score is attached as Appendix 1 to GM11.

Furthermore, this AMC also introduces the term 'ATS supported by automation' that is aligned with the changes in terminology introduced by the Eurocontrol UG in the RAT guidance material and describes more appropriately the nature of technical occurrences that are covered and that affect the ATS.

Finally, clarification on several criteria is also provided.

# GM11 SKPI Severity classification based on the risk analysis tool methodology — Methodology for ATM-specific occurrences

The text of this GM has been modified in order to reflect the changes made to AMC7 SKPI 'Severity classification based on the RAT methodology — Methodology for ATM-specific occurrences'.

In the examples (scenarios A, B and C), an explanation has been added to clarify that when an event goes beyond T1, then severity shall be higher than 'E'. It is assumed that if the event does not reach T1 (T0–T1), then the severity shall be 'E' and there is no need to apply the methodology any further.

# Appendix 1 to GM11 – Look-up table for severity classification of ATM-specific occurrences:

As explained in AMC7, the look-up table has been modified in order to illustrate the following changes:

- 'Air Traffic Services' is replaced with 'Air Traffic Services supported by automation'.
- o Insertion of a new part addressing the applicability of RAT severity to the ATM-specific occurrences of the Network Manager.

#### 3. References

#### 3.1. Related regulations

N/A

#### 3.2. Affected decisions

— ED Decision 2014/035/R of 16 December 2014 of the Executive Director of the Agency adopting Acceptable Means of Compliance and Guidance Material for point 1 of Section 2 of Annex I to Regulation (EU) No 390/2013 and repealing Decision 2011/017/R of the Executive Director of the Agency of 16 December 2011— 'AMC and GM for the implementation and measurement of safety (Key) Performance Indicators (S(K)PIs)' — Issue 2.

#### 3.3. Reference documents

- 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).
- 2014/132/EU: Commission Implementing Decision of 11 March 2014 setting the Union-wide targets for the air traffic management network and alert thresholds for the second reference period 2015-2019 (OJ L 71, 12.03.2014, p. 20).
- Regulation (EU) No 376/2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (OJ L 122, 24.4.2014, p. 18).
- NPA 2013-08 'Requirements for ATM/ANS providers and the safety oversight thereof'.

# 4. Appendices

Appendix 1 to GM11 – Look-up table for severity classification of ATM-specific occurrences.