Rescue and firefighting services — remission factor, cargo flights, etc.

**EXECUTIVE SUMMARY**

This Decision addresses safety and proportionality issues related to the provision of rescue and firefighting services (RFFS) at aerodromes.

The specific objective of the Decision is to maintain a high uniform level of civil aviation safety in the field of aerodrome operations, by clarifying and offering adequate guidance on the provision of RFFS. The proposal also introduces new provisions included in International Civil Aviation Organization (ICAO) Annex 14 (Sixth Edition), as well as guidance material from ICAO Doc 9137, Part 1 (Fourth Edition), thereby fulfilling the European Union (EU)'s commitment to support Member States (MSs) to meet their obligations towards ICAO.

This Decision introduces changes to the existing acceptable means of compliance (AMC) and guidance material (GM) annexed to ED Decision 2014/012/R. More specifically, it:

- introduces a new method of determining the rescue and firefighting (RFF) level of protection required for all-cargo, mail, ferry, training, test and end-of-life aeroplane operations;
- provides a common methodology for reducing the RFF level of protection;
- provides a methodology for calculating the required quantities of extinguishing agents;
- clarifies the role and responsibilities of RFFS; and
- strengthens the requirements for the maintenance of RFF vehicles and equipment, by including them in the aerodrome maintenance programme.

The proposed changes are expected to maintain a high level of safety, increase the cost-effectiveness of the existing AMC/GM applicable to aerodromes and their operators, strengthen harmonisation across MSs and ensure compliance with ICAO.

<table>
<thead>
<tr>
<th>Applicability</th>
<th>Process map</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affected regulations and decisions:</td>
<td>Terms of reference (ToR), Issue 1: 10.4.2014</td>
</tr>
<tr>
<td>Aerodrome operators</td>
<td>Concept paper (CP): No</td>
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<tr>
<td>Safety/proportionality and cost-effectiveness</td>
<td>Rulemaking group (RMG): Yes</td>
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<tr>
<td>N/a</td>
<td>Regulatory impact assessment (RIA) type: Light</td>
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<tr>
<td>N/a</td>
<td>Technical consultation during notice of proposed amendment (NPA) drafting: Yes</td>
</tr>
</tbody>
</table>

**Related**

Table of contents

1. Procedural information .................................................................................................................................. 3
   1.1. The rule development procedure............................................................................................................ 3
   1.2. Structure of the related documents ......................................................................................................... 4

2. Explanatory note ............................................................................................................................................. 5
   2.1. Overview of the issues to be addressed .................................................................................................. 5
   2.2. Objectives ................................................................................................................................................ 5
   2.3. Outcome of the consultation .................................................................................................................... 5
   2.4. Summary of the RIA .................................................................................................................................. 6
   2.5. Overview of the amendments ................................................................................................................... 6

3. References ...................................................................................................................................................... 9
   3.1. Related regulations .................................................................................................................................... 9
   3.2. Affected decisions .................................................................................................................................... 9
   3.3. Reference documents ............................................................................................................................... 9
1. **Procedural information**

1.1. **The rule development procedure**

The European Aviation Safety Agency (hereinafter referred to as the ‘Agency’) developed ED Decision 2016/009/R in line with Regulation (EC) No 216/2008 (hereinafter referred to as the ‘Basic Regulation’) and the Rulemaking Procedure².

This rulemaking activity is included in the Agency’s 5-year Rulemaking Programme under RMT.0589. The scope and timescales of the task were defined in the related ToR.

The draft text of this Decision has been developed by the Agency based on the input of RG RMT.0589. All interested parties were consulted through NPA 2015-09³. The Agency received a total of 111 comments from interested parties, including national aviation authorities (NAAs), aerodrome operators and aerodrome associations, aircraft operators and aircraft operators’ associations, as well as social partners and General Aviation (GA) associations. The comments received by the commentators are distributed as follows:

![Distribution of comments per commentator](image)

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2. The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such a process has been adopted by the Agency’s Management Board and is referred to as the ‘Rulemaking Procedure’. See Management Board 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 (Rulemaking Procedure).

3. In accordance with Article 2 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.
The Agency has reviewed the comments received on the NPA. The comments received and the Agency’s responses thereto are presented in Comment-Response Document (CRD) 2015-094.

The final text of this Decision with the AMC/GM has been developed by the Agency based on the input of RMG RMT.0589. The Agency decided not to proceed with focused consultation because the majority of the comments received were supportive of the proposals.

The process map on the title page summarises the major milestones of this rulemaking activity.

1.2. Structure of the related documents

Chapter 1 contains the procedural information related to this task. Chapter 2 explains the core technical content. Chapter 3 summarises the findings from the RIA. The text of the AMC/GM is annexed to this ED Decision.

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2. **Explanatory note**

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

This Decision addresses issues related to the provision of RFFS at aerodromes. It clarifies the following:

— the conditions under which the RFF level of protection at aerodromes may be reduced;
— the role and the scope of RFFS;
— the method that should be used to calculate the required extinguishing agents when the RFF level of protection is reduced;
— the response time;
— the type of vehicles to be included in the minimum number of vehicles required for RFF purposes; and
— the inclusion of RFFS vehicles in the aerodrome maintenance programme.

2.2. **Objectives**

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. The principal objective of the Basic Regulation is to establish and maintain a high uniform level of safety, while additional objectives are to promote efficiency in the regulatory process, assist the MSs in fulfilling their obligations under the Chicago Convention, and provide a level playing field in the internal aviation market. This Decision will contribute to the achievement of the overall objectives by addressing the issues outlined in Chapter 2.1.

The specific objective of this proposal is therefore to:

— ensure that the RFF level of protection at aerodromes serving all-cargo, mail, training, test, ferry and end-of-life aeroplane operations is proportionate to these types of traffic and their particular requirements;
— ensure a more transparent and harmonised implementation of the option to reduce the RFF level of protection at aerodromes under certain circumstances;
— provide detailed GM concerning the determination of the RFF level of protection;
— amend the existing AMC/GM related to RFFS, where necessary, in order to provide clarity on their application; and
— address ICAO Annex 14 standards and recommended practices (SARPs) that have not been transposed into the initial issue of AMC/GM.

2.3. **Outcome of the consultation**

The NPA proposal was supported by both NAAs and industry. The majority of the commentators requested some clarifications. In CRD 2015-09, the Agency provided responses and explanations to all the comments received. Around 50% of the comments have been accepted or partially accepted and only around 10% thereof have been rejected because they were out of the scope of the Agency’s proposals.
2.4. **Summary of the RIA**

The proposed changes will have a general positive impact. In terms of safety, the clarification of the definition of the response time, the recalculation of extinguishing agents for larger aeroplanes, as well as the clarifications provided for the RFF vehicles and their inclusion in the maintenance programme of the aerodrome are expected to maintain and, in some cases, increase the level of safety. The option for the aerodrome operator to adjust the RFF level of protection based on the type of traffic and the number of aeroplane movements allows a better allocation and utilisation of resources, leading to cost savings without degrading the level of safety. Finally, the AMC issued by the Agency together with the GM will ensure to a large extent the implementation of ICAO provisions, giving, however, the necessary flexibility to aerodrome operators to apply different solutions based on their needs.

2.5. **Overview of the amendments**

**GM1 ADR.OPS.B.010(a)(1) Rescue and firefighting services**

This GM refers to the availability and scope of RFFS. The role of ambulance and medical services, although they attend and support RFFS during an aircraft accident, is to treat injured passengers following a rescue operation. It is therefore not appropriate to include them in the scope of RFFS. In addition to the proposed text and following comments received, the Agency aligned the text with the introductory note to 9.2 of ICAO Annex 14 and made also reference to GM3 ADR.OPS.B.005(a) which refers to the aerodrome emergency plan (AEP) document, where the responsibilities of the ambulance and medical services should be included.

**AMC2 ADR.OPS.B.010(a)(2) Rescue and firefighting services**

This AMC deals with the level of protection that RFFS should provide at an aerodrome. The main changes are the following:

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- The possibility for the aerodrome operator to reduce the level of protection by one category below the aerodrome category if the number of movements of the aeroplanes of the highest category using the aerodrome is less than 700 during the busiest consecutive three months, in accordance with ICAO Standard 9.2.3.

- A new table introducing the level of protection required for all-cargo, mail, training, maintenance, ferry and end-of-life aeroplane operations based on ICAO Doc 9137, Part I, in order to implement Note 1 to ICAO Standard 9.2.6.

- A redrafting of Point (b) to further explain the meaning of ‘anticipated periods of reduced activity’, to make the reduction in the level of protection during this period optional and not recommended as the current wording implies, and finally to ensure that the periods where the level of protection is reduced are promulgated through aeronautical information services (AIS).

- The conduct of an assessment by the aerodrome operator of the future traffic levels at the aerodrome in order to adjust the level of protection. Initially, the Agency proposed that the assessment be conducted every six months; however, considering the fact that flight schedules change twice a year, the period has been adjusted to once a year.

- A better definition of the unforeseen circumstances that may lead to the reduction in the RFF level of protection.
— Point (f) that allows the aerodrome operator to accept any aircraft being in an emergency situation even if the aeroplane category for RFFS is higher than the level of protection provided by the aerodrome. This Point has been redrafted after the public consultation of the NPA because the wording initially used was not clear and raised questions by the air operators.

**AMC3 ADR.OPS.B.010(a)(2)  Rescue and firefighting services**

The current AMC implements ICAO Annex 14 Recommendation 9.2.41 concerning the minimum number of RFF vehicles that should be available at an aerodrome based on the RFF category established at the aerodrome. Although not specifically mentioned in the ICAO text, these vehicles should be capable of effectively delivering and deploying the extinguishing agents specified for the aerodrome category. Considering the fact that nowadays many aerodromes have also other vehicles to support RFF which, however, are not used for delivering and deploying extinguishing agents, it was necessary for the Agency to provide this clarification.

**AMC4 ADR.OPS.B.010(a)(2)  Rescue and firefighting services**

This AMC addresses issues related to the quantities of extinguishing agents that should be available at an aerodrome. The following additions have been made:

— Transpose ICAO Annex 14, Standard 9.2.14 on the quantity of foam concentrates to be carried by RFF vehicles in relation to the water carried. This addition is essential to ensure that the extinguishing agents produced by the RFF vehicles have the proper quality level to maximise efficiency.

— Allow any quantity of complementary agents above the minimum required to be available at the aerodrome and be included in the reserve supply, by analogy with the same principle applied to extinguishing agents.

— Recommend that when the RFF level of protection is reduced, the calculation of the quantities of the extinguishing agents should be based on the largest aeroplane in the reduced category. This provision is based on ICAO Doc 9137, Part 1 (Fourth Edition, 2014), and the objective is to ensure that when the RFF level of protection is less than the RFF aerodrome category, the aerodrome capabilities should be as close as possible to the requirements for aeroplanes in the higher category. The same principles also apply when calculating the amount of extinguishing agents required for all-cargo, mail, ferry, etc. aeroplane operations.

**AMC5 ADR.OPS.B.010(a)(2)  Rescue and firefighting services**

This AMC defines the response time of the RFFS when alerted to attend an aircraft accident. The current wording does not explicitly specify when the response time starts. The proposed wording gives a clear explanation of the response time and aligns the AMC with Note 1 to Standard 9.2.27 and Recommendations 9.2.28 and 9.2.29 of ICAO Annex 14, Vol I (Sixth Edition).
GM4 ADR.OPS.B.010(a)(2)  Rescue and firefighting services

This GM has been revised firstly because all the guidance related to the conditions that could allow a decrease in the level of protection has been moved to AMC2 ADR.OPS.B.010(a)(2) to ensure a more harmonised application, and secondly in order to emphasise the need for the aerodrome operator to have contingency arrangements in place to deal with unforeseen reductions in the level of protection. Furthermore, guidance for aerodrome operators is added concerning the information that should be provided to aerodrome operators when the level of protection is reduced.

GM5 ADR.OPS.B.010(a)(2)  Rescue and firefighting services

This is a new GM that provides worked examples on how to calculate the RFF level of protection at an aerodrome taking into consideration the number of movements and the type of flights operating at the aerodrome. The GM incorporates guidance stemming from ICAO Doc 9137, Part 1 and is expected to support aerodromes operators in their decision-making process.

GM6 ADR.OPS.B.010(a)(2)  Rescue and firefighting services

As explained before, when there is a reduction in the level of protection provided at an aerodrome, or there are operations by aeroplanes in a higher category than that of the average aeroplane in a given category, the amounts of water should be recalculated based on the largest aeroplane instead of using the average aeroplane (where amounts are already given). The new calculations are based on the critical-area concept applied by ICAO. The purpose of this GM is to provide guidance to the aerodrome operators on how to apply this concept, which is based on ICAO Doc 9137, Part 1.

AMC1 ADR.OPS.C.005  General

This AMC has been revised in order to specifically include RFF vehicles in the maintenance programme of the aerodrome. RFF vehicles play an important role in the capabilities, efficiency and readiness of RFFS. A maintenance programme for these vehicles is essential in order to ensure continuous availability and maximum performance. The current AMC states that a maintenance programme should exist for vehicles and equipment which are necessary for the safety of aerodrome operations. Considering the importance of RFFS, the AMC makes specific reference to these vehicles.
3. References

3.1. Related regulations

3.2. Affected decisions

3.3. Reference documents