



**NOTICE OF PROPOSED AMENDMENT (NPA) 2012-12**

**DRAFT OPINION OF THE EUROPEAN AVIATION SAFETY AGENCY**

**amending Commission Regulation (EU) No 20xx/xx of xx Month xx establishing  
the Implementing Rules for air operations**

**and**

**DRAFT DECISION OF THE EXECUTIVE DIRECTOR OF THE EUROPEAN AVIATION SAFETY AGENCY**

**amending Acceptable Means of Compliance and Guidance Material  
to Part-CAT and Part-ORO**

**'Transfer of JAA cabin safety tasks'**

## EXECUTIVE SUMMARY

The NPA 2012-12 includes tasks which were transferred to the Agency from the Joint Aviation Authorities. The proposal addresses the following:

1. Incapacitation and replacement of Senior cabin crew member:

The aim is to clarify the intent of the paragraph ORO.CC.200(e), transferred from EU-OPS 1.1000(d), requiring the operator to establish procedures on replacement of Senior cabin crew member in case the nominated individual becomes unable to operate. The NPA 2012-12 proposes a modified text of the regulatory requirement, further new AMC on who can replace an incapacitated or unavailable Senior cabin crew member and GM explaining the concept of incapacitation and unavailability, and providing some guidance on assigning a prompt replacement.

2. Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members:

The aim is to develop a regulatory requirement requiring a qualified person on board the aircraft during ground operations with passengers embarking, on board or disembarking in the absence of flight crew members who will establish and coordinate communication with aerodrome services in case of urgent need or emergency.

## TABLE OF CONTENTS

<b>A.</b>	<b>EXPLANATORY NOTE .....</b>	<b>4</b>
I.	GENERAL .....	4
II.	CONSULTATION.....	4
III.	COMMENT-RESPONSE DOCUMENT .....	5
IV.	CONTENT OF THE DRAFT OPINION/DECISION .....	5
V.	REGULATORY IMPACT ASSESSMENT .....	10
1	PROCESS AND CONSULTATION .....	10
2	ISSUE ANALYSIS AND RISK ASSESSMENT.....	10
3	OBJECTIVES.....	16
4	IDENTIFICATION OF OPTIONS .....	17
5	ANALYSIS OF IMPACTS .....	18
5.1	SAFETY IMPACT .....	18
5.2	ENVIRONMENTAL IMPACT .....	19
5.3	SOCIAL IMPACT .....	20
5.4	ECONOMIC IMPACT .....	20
5.5	PROPORTIONALITY ISSUES .....	21
5.6	IMPACT ON REGULATORY COORDINATION AND HARMONISATION .....	21
6	CONCLUSION AND PREFERRED OPTION .....	21
<b>B.</b>	<b>DRAFT OPINION AND DECISION .....</b>	<b>23</b>
I.	INCAPACITATION AND REPLACEMENT OF SENIOR CABIN CREW MEMBER.....	23
II.	COMMUNICATION BETWEEN A PERSON ON BOARD THE AIRCRAFT AND AERODROME SERVICES DURING GROUND OPERATIONS WITH PASSENGERS ON BOARD AND IN THE ABSENCE OF FLIGHT CREW MEMBERS.....	27
<b>C.</b>	<b>APPENDICES .....</b>	<b>31</b>
<b>D.</b>	<b>ATTACHMENTS .....</b>	<b>32</b>

## A. Explanatory Note

### I. General

1. The purpose of this Notice of Proposed Amendment (NPA) is to amend the future Commission Regulation<sup>1</sup> establishing the Implementing Rules for air operations and the related Decision of the Executive Director of the European Aviation Safety Agency on Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Part-CAT<sup>2</sup> and Part-ORO<sup>3</sup>. The scope of this rulemaking activity is outlined in Terms of Reference (ToR) RMT.0327/0328 (OPS.058(a)-OPS.058(b)) and it is described in more details below.
2. The European Aviation Safety Agency (hereinafter referred to as the 'Agency') is directly involved in the rule-shaping process. It assists the Commission in its executive tasks by preparing draft Regulations, and amendments thereof, for the implementation of Regulation (EC) No 216/2008 (hereinafter referred to as the 'Basic Regulation')<sup>4</sup> which are adopted as 'Opinions' (Article 19(1)). It also adopts Certification Specifications, including Airworthiness Codes and Acceptable Means of Compliance and Guidance Material to be used in the certification process (Article 19(2)).
3. When developing rules, the Agency is bound to follow a structured 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'<sup>5</sup>.
4. This rulemaking activity is included in the Agency's Rulemaking Programme for 2013-2016. It implements the rulemaking task RMT.0327/0328 (OPS.058(a)-OPS.058(b)).
5. The text of this NPA has been developed by the Agency. It is submitted for consultation of all interested parties in accordance with Article 52 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.

The proposed rule has taken into account the development of the European Union and international law (ICAO), and the harmonisation with the rules of other authorities of the European Union's main partners as set out in the objectives of Article 2 of the Basic Regulation. The proposed rule takes into account developments of relevant European Union law and addresses implementation problems that have already been identified by the Joint Aviation Authorities (JAA).

### II. Consultation

6. To achieve optimal consultation, the Agency is publishing the draft Decision of the Executive Director on its Internet site. Comments should be provided within 3 months in accordance with Article 6(4) of the Rulemaking Procedure.

Please submit your comments using the **automated Comment-Response Tool (CRT)** available at <http://hub.easa.europa.eu/crt/><sup>6</sup>.

The deadline for the submission of comments is **29 November 2012**.

<sup>1</sup> The rules were published in the EASA Opinion 04/2011 'Air Operations – OPS' and are currently undergoing a process at the Commission level. Publication is expected in 2012.

<sup>2</sup> Annex IV to the EASA Opinion 04/2011 'Air Operations – OPS'.

<sup>3</sup> Annex III to the EASA Opinion 04/2011 'Air Operations – OPS'.

<sup>4</sup> 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, 19.03.2008, p. 1). Regulation as last amended by Regulation 1108/2009 of the European Parliament and of the Council of 21 October 2009 (OJ L 309, 24.11.2009, p. 51).

<sup>5</sup> Management Board Decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure), EASA MB 01-2012, 13.3.2012.

<sup>6</sup> In case the use of the Comment-Response Tool is prevented by technical problems, please report them to the CRT webmaster ([crt@easa.europa.eu](mailto:crt@easa.europa.eu)).

### III. Comment-Response Document

7. All comments received in time will be responded to and incorporated in a Comment-Response Document (CRD). The CRD will be available on the Agency's website and in the Comment-Response Tool.

### IV. Content of the draft Opinion/Decision

8. This NPA includes a proposal to amend the future Commission Regulation establishing the Implementing Rules for air operations and the related Decision of the Executive Director of the European Aviation Safety Agency (hereinafter referred to as the "Decision") containing AMC and GM to Part-CAT and Part-ORO on the issues explained below.
9. This NPA includes two subtasks. Both subtasks originate from the Joint Aviation Authorities (JAA). When the JAA ended its activity in 2009, both tasks were transferred to the Agency and were included in the Agency's rulemaking programme as one merged task titled 'Transfer of JAA cabin safety tasks' under the number RMT.0327/0328 (OPS.058(a)-OPS.058(b)).
10. Taking into account the progress of the tasks under the JAA, this rulemaking task was completed as an Agency task not requiring the involvement of a Rulemaking Group. The proposals included in this NPA were drafted, consulted and reviewed by experts within the Agency.
11. The part D. 'Attachments' of this NPA contains Attachment 1 'EASA safety analysis report for RMT.0327/0328 based on data retrieved from EASA copy of ICAO ADREP data base'. The report is attached to this NPA for reader's information only to complement the Regulatory Impact Assessment (RIA) of this NPA. The report is not included in CRT for comments.
12. This NPA contains two different tasks. For easy reference the Agency would like to request the commentator, when entering comments in CRT, to also include the referenced paragraph number. .

#### *Background*

#### ***Incapacitation and replacement of Senior cabin crew member***

13. In 2005, the Central Joint Aviation Authorities (CJAA) received an enquiry referring to then applicable JAR-OPS 1.1000(d) Senior cabin crew members<sup>7</sup>. The enquiry addressed the lack of clarity of the paragraph resulting in various interpretations by European operators and leading to operational misapplications. The CJAA concluded that proper understanding of the requirement could only be achieved by referring to several other paragraphs of JAR-OPS and could therefore lead to different interpretations and possible non-compliance. Further details of the enquiry are explained in the Regulatory Impact Assessment (RIA) to this NPA.
14. The referenced text of JAR-OPS 1.1000(d) was transposed into the Commission Regulation (EC) No 859/2008<sup>8</sup> (hereinafter referred to as 'EU-OPS') in OPS 1.1000(d)<sup>9</sup>

<sup>7</sup> **JAR-OPS 1.1000 Senior cabin crew members**

...

*(d) An operator shall establish procedures to select the next most suitably qualified cabin crew member to operate as senior cabin crew member in the event of the nominated senior cabin crew member becoming unable to operate. Such procedures must be acceptable to the Authority and take account of a cabin crew member's operational experience.*

<sup>8</sup> Commission Regulation (EC) No 859/2008 of 20 August 2008 amending Council Regulation (EEC) No 3922/91 as regards common technical requirements and administrative procedures applicable to commercial transportation by aeroplane

<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:254:0001:0238:EN:PDF>.

<sup>9</sup> **OPS 1.1000 Senior cabin crew members**

...

which came into effect in 2008. During the development of the EASA Opinion 04/2011 'Air Operations – OPS'<sup>10</sup>, the purpose of which was to assist the European Commission in establishing the Implementing Rules for air operations (hereinafter referred to as the 'Opinion 04/2011'), the Agency transposed the text of OPS 1.1000(d) into the Annex III – Part-ORO, Subpart-CC, ORO.CC.260(d)<sup>11</sup>. In view of the upcoming rulemaking task RMT.0327/0328, no modifications were made to the concerned paragraph. Similarly to JAR-OPS, in the case of both EU-OPS and the new regulatory requirements included in the Opinion 04/2011, a reference to several other paragraphs of the regulatory requirements is essential to achieve a proper understanding of the rule. More details are provided in the RIA to this NPA.

15. The order of the paragraphs in the Agency's proposed Opinion 04/2011, Annex III, Subpart-CC has been changed during the comitology process and the text, that represents the subject of this subtask of this NPA, is now included in ORO.CC.200(e). Therefore, both the proposed amendment and the RIA refer to the new paragraph number.
16. This NPA addresses the following main issues:
  - A) The difference between the Senior cabin crew member's inability to continue flight duty due to an occurrence happening during a flight duty period or at a stopover (layover) destination and the individual's inability to report for any flight duty due to substantiated absence from work due to e.g. sick leave, medical leave, pregnancy, maternity/paternity leave, parental leave, etc.; the latter would not result in the Senior cabin crew member being considered incapacitated or unavailable:
    - *incapacitation* in this NPA refers to an occurrence happening during a flight duty period that precludes the Senior cabin crew member from performing his/her duties;
    - *unavailability* in this NPA refers to an occurrence happening at a stopover (layover) destination that prevents the Senior cabin crew member from reporting for the continuation of the duty (the remainder of the series of flights).
  - B) Clarification on who is the replacement of the nominated Senior cabin crew member who became incapacitated or unavailable, and of the Senior cabin crew member who did not report for or could not commence the assigned flight originating from his/her assigned crew base;
  - C) Clarification on a prompt replacement of the nominated Senior cabin crew member who became incapacitated/unavailable or does not report for or cannot commence the assigned flight originating from his/her assigned crew base.

Explanation is provided in the points 2.2.1 and 2.3.1 of the RIA to this NPA.

17. The text of the Opinion 04/2011 reflects the term "senior cabin crew member" with lowercase letter "s". This NPA does not use the full term; instead, it introduces an abbreviation of this term - "SCCM". Modifications have also been made in those

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(d) *An operator shall establish procedures to select the next most suitably qualified cabin crew member to operate as senior cabin crew member in the event of the nominated senior cabin crew member becoming unable to operate. Such procedures must be acceptable to the Authority and take account of a cabin crew member's operational experience.*

<sup>10</sup> Opinion 04/2011 of the European Aviation safety Agency of 1 June 2011 for a Commission Regulation establishing the Implementing Rules for air operations 'Air Operations – OPS' <http://easa.europa.eu/agency-measures/opinions.php>.

<sup>11</sup> **ORO.CC.260 Senior cabin crew member**

...

(d) The operator shall establish procedures to select the most appropriately qualified cabin crew member to act as senior cabin crew member if the nominated senior cabin crew member becomes unable to operate. Changes to these procedures shall be notified to the competent authority.

paragraphs of the Opinion 04/2011 and of the related Decision where the term "senior cabin crew member" is used with lowercase letter "s". This is to ensure a correct interpretation of the term as referring to the cabin crew member "in charge".

18. The resulting draft Amendment proposal is included in the part B. I of this NPA.

***Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members***

19. This NPA proposal refers to a requirement of a qualified person on board the aircraft during ground operations (other than refuelling/defueling) with passengers embarking, on board or disembarking when flight crew members are absent. This qualified person would be able to establish and coordinate communication with aerodrome services in case of urgent need or emergency on board the aircraft.
20. This task was initiated by the JAA Operations Procedures Steering Group (OPSG) as a proactive safety initiative, as a result of identification of a safety need to prevent incidents/accidents that may occur in the future. The issue is discussed in further details in the RIA to this NPA. The initiation of this task by OPSG originated from the fact that the operational requirements (JAR-OPS and EU-OPS) addressed the need for a qualified person to be present on board the aircraft during ground operations with passengers embarking, on board or disembarking during the instances of refuelling/defueling only. Furthermore, the operational requirements required at least one member of flight crew to be in the flight crew compartment during ground operations with passengers on board when the number of cabin crew has been reduced below the minimum required.
21. These provisions have been transferred into the Opinion 04/2011 in its Annex IV, Part-CAT, CAT.OP.MPA.195<sup>12</sup> and the Decision containing AMC and GM to Part-CAT - in AMC1 CAT.OP.MPA.195<sup>13</sup> - as well as into the Annex III, Part-ORO, Subpart-CC, ORO.CC.205<sup>14</sup> and the Decision containing AMC and GM to Part-ORO, AMC1 ORO.CC.205(c)(1)<sup>15</sup>.
22. This NPA proposes a new requirement addressing ground operations with passengers embarking, on board or disembarking when flight crew members are absent. In order not to disrupt the structure and the paragraphs numbering of the Opinion 04/2011, the NPA proposes to merge the text of paragraphs *CAT.OP.MPA.195 Refuelling/defueling with passengers embarking, on board or disembarking* and *CAT.OP.MPA.200 Refuelling/defueling with wide-cut fuel* into one paragraph CAT.OP.MPA.200 titled "Refuelling/defueling". The available paragraph CAT.OP.MPA.195 will be dedicated to the newly proposed requirement: CAT.OP.MPA.195 titled "Ground operations with passengers in the absence of flight crew". The Decision containing AMC and GM to Annex IV, Part-CAT would be amended accordingly.
23. The resulting proposal is included in the point B. II of this NPA.
24. The EASA Opinion 04/2011 is currently undergoing the scrutiny process by the European Parliament and the Council; therefore, it may still be subject to changes. Should this happen, the proposed text in this NPA may need to be amended.
25. Furthermore, the Decisions have not been adopted yet and, therefore, may still be subject to changes. Should this happen, the proposed text in this NPA may need to be amended.

<sup>12</sup> CAT.OP.MPA.195 Refuelling/defuelling with passengers embarking, on board or disembarking.

<sup>13</sup> AMC1 CAT.OP.MPA.195 Refuelling/defuelling.

<sup>14</sup> ORO.CC.205 Normal ground operations and unforeseen circumstances.

<sup>15</sup> AMC1 ORO.CC.205(c)(1) Reduction of the minimum number of cabin crew during ground operations and in unforeseen circumstances. PROCEDURES WITH REDUCED NUMBER OF CABIN CREW.

**The envisaged changes to the Commission Regulation establishing Implementing Rules for air operations:**

26. In Annex III, Part-ORO, Subpart-CC:
1. ORO.CC.200 Senior cabin crew member – the abbreviation “SCCM” replaced the term “senior cabin crew member” throughout the entire paragraph.
  2. ORO.CC.200 Senior cabin crew member, point (e) – a new text.
  3. ORO.CC.205(c)(2) – the abbreviation “SCCM” replaced the term “senior cabin crew member”.
27. In Annex IV, Part-CAT:
1. CAT.OP.MPA.195 – a new title “Ground operations with passengers in the absence of flight crew” followed by a new text.
  2. CAT.OP.MPA.200 – the paragraph title has been changed to “Refuelling/defueling”. The paragraph contains all requirements regarding refuelling/defueling with wide-cut fuel, Avgas fuel, mixture of these types of fuel and any other types of fuel, and requirements when passengers are embarking, on board or disembarking.

**The envisaged changes to the Decisions containing AMC and GM to Part-ORO and Part-CAT:**

28. In Part-ORO:
1. New AMC containing two separate subparagraphs followed by a new text:  
 AMC1 ORO.CC.200(e) Senior cabin crew member  
 REPLACEMENT OF THE INCAPACITATED OR UNAVAILABLE SCCM  
 A separate paragraph titled: BY ANOTHER SCCM  
 A separate paragraph titled: BY MOST APPROPRIATELY QUALIFIED CABIN CREW MEMBER
  2. AMC1 ORO.CC.200(e)(iii) Senior cabin crew member  
 REPLACEMENT OF SCCM BY THE MOST APPROPRIATELY QUALIFIED CABIN CREW MEMBER
  3. New GM followed by a new text:  
 GM1 ORO.CC.200(e) Senior cabin crew member  
 REPLACEMENT OF INCAPACITATED OR UNAVAILABLE SCCM BY ANOTHER SCCM
  4. New GM followed by a new text:  
 GM2 ORO.CC.200(e) Senior cabin crew member  
 INCAPACITATION AND UNAVAILABILITY
  5. The abbreviation “SCCM” replaced the term “senior cabin crew member” - introduced with a lower case letter “s” - in the text of the following paragraphs:  
 AMC1 ORO.GEN.110(f)(h) Operator responsibilities – subparagraph (b)(1)  
 AMC3 ORO.MLR.100 Operations manual – general – subparagraph 4.1(g)  
 AMC1 ORO.CC.115(e) Conduct of training courses and associated checking - subparagraphs (b)(1) and (b)(3) and (b)(3)(i)(ii)  
 GM1 ORO.CC.115(e) Conduct of training courses and associated checking – subparagraph (b)(2)  
 AMC1 ORO.CC.135 Familiarisation – subparagraph (b)(2)(i)  
 AMC1 ORO.CC.200(c) Senior cabin crew member – the introductory sentence



AMC1 ORO.CC.200(d) Senior cabin crew member – the introductory sentence

AMC1 ORO.CC.205(c)(1) Reduction of the number of cabin crew during ground operations and in unforeseen circumstances – subparagraphs (a)(2) and (a)(5)

29. In Part-CAT:

1. AMC1 CAT.OP.MPA.195 – the paragraph number has been changed to “AMC1 CAT.OP.MPA.200(b)”. A new subtitle has been added REFUELLING/DEFUELLING WITH PASSENGERS EMBARKING, ON BOARD OR DISEMBARKING. The content of this AMC1 remains unchanged.
2. No AMC has been drafted for CAT.OP.MPA.195 Ground operations with passengers in the absence of flight crew; therefore, AMC1 CAT.OP.MPA.195 does not exist now.
3. GM1 CAT.OP.MPA.200 – the title of the paragraph has been amended to “GM1 CAT.OP.MPA.200(a)”. The subtitle of the GM has been amended and now reflects PROCEDURES FOR REFUELLING/DEFUELLING WITH WIDE-CUT FUEL.

## V. Regulatory Impact Assessment

### 1 Process and consultation

The scope of this rulemaking activity is outlined in the Terms of Reference (ToR) for rulemaking task RMT.0327/0328 (OPS.058(a)-OPS.058(b)) issued on 26 September 2011<sup>16</sup>.

The ToR describe two subtasks of this rulemaking task: *Incapacitation and replacement of Senior cabin crew member* and *Communication between a person on board the aeroplane and aerodrome emergency services during ground operations with passengers on board and in the absence of flight crew members*.

The initiative to start tasks on both subjects originates from the Joint Aviation Authorities (JAA). The subject *Incapacitation and replacement of Senior cabin crew member* was to clarify the applicable paragraph of the operational requirement hence avoiding misinterpretations and possible non-compliance by European operators. The subject *Communication between a person on board the aeroplane and aerodrome emergency services during ground operations with passengers on board and in the absence of flight crew members* was initiated as a proactive safety initiative to avoid possible incidents/accidents in the future since the issue is not covered by the applicable operational requirements.

When JAA ceased its activity in 2009, both tasks were transferred to the Agency and were included in the Rulemaking programme as one merged task RMT.0327/0328 (OPS.058(a)-OPS.058(b)) titled '*Transfer of JAA cabin safety tasks*'. The result of these tasks represents a draft proposal to amend the future Commission Regulation establishing the Implementing Rules for air operations and the related Decisions of the Executive Director of the European Aviation Safety Agency containing Acceptable Means of Compliance and Guidance Material.

The Agency selected a single-handed process for this task – the working method 'Agency'. The proposals included in this NPA and RIA were consulted and reviewed by experts within the Agency.

The following documents represented the base for developing the NPA 2012-12:

[Incapacitation and replacement of Senior cabin crew member](#)

JAA NPA-OPS 62.

[Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members](#)

Rulemaking proposal form prepared by JAA Operations Procedures Steering Group (OPSG) dated 4 May 2007.

Note: Pre-RIA for this task has not been developed by the Agency as the task was included in the Agency's Rulemaking programme as an item transferred from the JAA.

### 2 Issue analysis and risk assessment

#### 2.1 What is the issue and the current regulatory framework?

##### 2.1.1 Incapacitation and replacement of Senior cabin crew member

In 2005 an enquiry was received by Central JAA about then applicable paragraph of JAR-OPS 1.1000(d) Senior cabin crew members (SCCM):

- (d) *an operator shall establish procedures to select the next most suitably qualified cabin crew member to operate as senior cabin crew member in the event of the nominated senior cabin crew member becoming unable to operate. Such procedures must be acceptable to the Authority and take account of a cabin crew member's operational experience.*

<sup>16</sup> <http://easa.europa.eu/rulemaking/terms-of-reference-and-group-composition.php>.

The same text of the paragraph (d) was transposed by the European Commission into the Regulation (EC) 859/2008<sup>17</sup>, commonly referred to as EU-OPS, in OPS 1.1000(d) currently still applicable. In view of the Agency's upcoming rulemaking task RMT.0327/0328, the same text of the referenced paragraph (d) was also transposed into the paragraph ORO.CC.200(e) of the EASA Opinion 04/2011 'Air Operations – OPS'<sup>18</sup>, purpose of which was to assist the European Commission in establishing the Implementing Rules for air operations ('Opinion 04/2011'):

The enquiry sent to JAA addressed the lack of clarity of the referenced paragraph and conflicting interpretations by European operators. The following questions were to be answered:

1. *'in the event of the nominated senior cabin crew member becoming unable to operate'* – does 'becoming unable' refer to incapacitation occurring in flight, or a few hours, or days before?
2. *'select the next most suitably qualified cabin crew member to operate as senior cabin crew member'* – how long is this substitution allowed, e.g. single sector, or round trip, or all rostered flights for the month?
3. Does JAR-OPS 1.1000 disallow any flights to depart from base with an SCCM substitute, i.e. if a cabin crew member replaces a SCCM, must he/she be replaced by a SCCM once he/she has a stopover at base?

The proper understanding of this paragraph can only be achieved by referring to several other paragraphs of regulatory requirements<sup>19</sup>. This could lead to a possible non-compliance, such as replacing a SCCM for the duration of sick leave, pregnancy and/or maternity/paternity or parental leave by a cabin crew member not appropriately qualified to carry out the duties of a SCCM.

This task was initiated by the JAA and resulted in the draft proposal JAA NPA-OPS 62. The aim of this rulemaking activity is to clarify the Implementing Rules and to amend the associated AMC/GM to ensure the clear understanding and the correct application of this requirement by EU operators.

### **2.1.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members**

The Directive 2003/42/EC<sup>20</sup> in its Article 9 enables Member States to establish a system of voluntary reporting *'to collect and analyse information on observed deficiencies in aviation which are not required to be reported under the system of mandatory reporting, but which are perceived by the reporter as an actual potential hazard'*.

The proposal to initiate this task was presented to JAA by the JAA's Operations Procedures Steering Group (OPSG) in 2007. The proposal represented a proactive safety initiative as a result of the identification of a safety need to prevent accidents/incidents that may occur in the future.

Currently, the operational requirement OPS 1.305 and its Appendix 1 to OPS 1.305 specify that an aircraft must be manned by a qualified person during fuelling operations with passengers embarking, on board or disembarking. The requirements further state that *'This*

<sup>17</sup> Commission Regulation (EC) No 859/2008 of 20 August 2008 amending Council Regulation (EEC) No3922/91 as regards common technical requirements and administrative procedures applicable to commercial transportation by aeroplane <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:254:0001:0238:EN:PDF>.

<sup>18</sup> Opinion 04/2011 of the European Aviation safety Agency of 1 June 2011 for a Commission Regulation establishing the Implementing Rules for air operations 'Air Operations – OPS' <http://easa.europa.eu/agency-measures/opinions.php>.

<sup>19</sup> OPS 1.175(g)(1); OPS 1.175(n); Appendix 2 to OPS 1.175(c)(1).  
ORO.AOC.100(c)(3); ORO.GEN.110(d) and (e); ORO.AOC.135(b).

<sup>20</sup> Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation.

*qualified person must be capable of handling emergency procedures concerning fire protection and fire-fighting, handling communications and initiating and directing an evacuation'.*

The operational requirement OPS 1.311 requires the minimum required number of cabin crew to be on board during ground operations whenever any passengers are on board. When the aircraft is at a parking place, the number of cabin crew may be reduced below the minimum required; the Appendix 1 to OPS 1.311(2.) states that *'a means of initiating an evacuation is available to the senior cabin crew member, or at least one member of the flight crew is on the flight deck'.*

These requirements were also transposed into the Opinion 04/2011 in paragraphs ORO.CC.205 and AMC1 ORO.CC.205(c)(1).

There are, however, situations during ground operations other than those mentioned above – instances not involving fuelling operations with passengers embarking, on board or disembarking or reduction of minimum required cabin crew, such as flight crew members' prior approval to commence passenger boarding and their own later arrival/return in/to the aircraft. If flight crew members are present, the necessary communication with the aerodrome services, whenever required, will be initiated by them. However, flight crew members may be absent and such situations pose a question of who and how can advise the aerodrome services about the urgent need or an emergency happening on board. The current and the future regulatory requirements address the need for the minimum required number of cabin crew during ground operations whenever any passengers are on board. The regulatory requirements, however, neither address the need of flight crew members to be on board (except for the case of reduction of the minimum number of cabin crew), nor do they address the requirement of a qualified person to be on board when flight crew members are absent in order to handle the communication with aerodrome services. The aim of this rulemaking activity is to cover these instances.

The rulemaking proposal form submitted by JAA's OPSG referred to the subject's title as "communication between an aircraft and aerodrome *emergency services*"; however, the analysis of the proposal made by OPSG reflected the requirement to alert the services in *the event of emergency or urgent need*. In order not to limit the intention of the rule to emergency situations only, such as fire, smoke, bomb threat, evacuation, etc. but to also cover circumstances that are not classified as emergencies, however, require the necessary attention and rapid action to prevent them from turning into an emergency, such as the airport medical practitioner to attend to a passenger who is not feeling well and hesitates whether to commence/continue the flight, etc. Therefore, the term "aerodrome emergency services" was modified to reflect the need of a qualified person on board an aircraft to alert *'aerodrome services'*.

## **2.2 Who is affected?**

### **2.2.1 Incapacitation and replacement of Senior cabin crew member**

Operators, cabin crew members and Senior cabin crew members.

The operator needs to ensure that a sufficient number of appropriately qualified personnel is on standby (e.g. at home or at the airport) and that appropriate measures are taken to ensure that the SCCM who does not report for or cannot commence the assigned flight originating from his/her assigned crew base is replaced so that the flight does not depart without a SCCM.

Furthermore, the operator has to take appropriate measures to ensure that the SCCM who became unavailable at the stopover (layover) destination or became incapacitated during a flight can be replaced without undue delay in outstation(s) and/or when the aircraft passes operator's base (during e.g. the same-day flight-pairing on which an incapacitation happened).

The operator also needs to establish procedures on replacing SCCM who became incapacitated during a flight. Operators may have more than one SCCM on the same flight: the leading SCCM and a SCCM responsible for a particular cabin section, such as Business or Economy class. If another SCCM is not available on the same flight, the incapacitated SCCM has to be

replaced with another appropriately qualified cabin crew member who will be capable of handling the duties and responsibilities of SCCM until the aircraft passes the next operator's base where another SCCM has been made available by the operator to take over. The operational experience, aircraft types/variants qualifications and training of a suitable cabin crew member need to be taken into account. The following examples can be used for a clearer illustration:

#### Example 1:

A330 crew team is scheduled to operate a 1-day duty consisting of two sectors; the flight is originating from the operator's base CDG: CDG-PRG-CDG. The SCCM (S1) becomes incapacitated before landing into PRG. If there is another SCCM on the same flight (e.g. responsible for Economy cabin – S2), the S2 will take over the duties and responsibilities of the incapacitated S1. If there is no other SCCM on the same flight, the cabin crew member most appropriately qualified and suitable to manage the duties and responsibilities of a SCCM will be assigned (acting SCCM - A/S) to take over for the sector PRG-CDG.

If, for example, the scheduled duty is a four-sector duty: CDG-PRG-CDG-TXL-CDG, another SCCM (e.g. from standby) will join the crew when the aircraft passes the operator's base (in this case CDG) for the sectors CDG-TXL-CDG.

If, for example, the scheduled duty is a three-sector duty: CDG-PRG-TXL-CDG and the operator has bases in CDG and TXL (not in PRG), another SCCM (e.g. from standby) can be made available in TXL.

#### Example 2:

B777 cabin crew team is scheduled on a duty that involves a stopover (layover) point; it can be a two-sector flight (e.g. FRA-BKK-FRA) or a several-day duty consisting of several sectors (e.g. FRA-BKK-CGK-BKK-FRA). Destinations to which the operator operates at higher frequencies and/or destinations with a crew change represent aerodromes where another SCCM is available or can be made available. The layover period provides the operator with sufficient time and flexibility to make another SCCM available as a replacement of the incapacitated/unavailable SCCM for the remainder of the series of flights. The operator can utilise SCCM from another crew team staying in the same layover point, or can position another SCCM to the concerned layover point (e.g. SCCM who is staying in another close-by layover point, e.g. in SIN, or from the operator's base).

### **2.2.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members**

Operators, as they will be required to establish the relevant procedures. At the discretion of the operator, the qualified person could be e.g. cabin crew members, maintenance personnel, aerodrome ground handling personnel, etc.

## **2.3 What are the safety risks?**

### **2.3.1 Incapacitation and replacement of SCCM**

#### 2.3.1.1 Senior cabin crew member

Senior cabin crew member is the leading cabin crew member whose responsibility is to manage flight operation related to cabin, i.e. collection of information related to the particular flight; cabin crew pre-flight briefing or de-briefing; management of cabin crew members assigned for the flight (leadership; time/workload/stress management; human factors and multicultural/multinational awareness; crew members' quality performance and assessment; coordination and monitoring of performance of safety duties; awareness and prevention of emergency situations; correct actions and instructions in situations related to safety, security and medical aspects; flight time limitations and rest requirements); decision-making; coordination on cabin-related matters with ground handling personnel/medical staff/security or police/engineers/catering/cleaning; coordination with flight crew members on cabin events and

progress; management of passengers including acceptance and correct seat allocation of special categories of passengers; coordination with flight crew members on the required seat distribution of passengers in the cabin according to the applicable weight and balance; correct application of operator's standard operating procedures; handling and distribution of documents related to the flight; incidents/accidents reporting and coordination with the operator on any disruptions when away from base; etc.

The regulatory requirements specify requirements for single cabin crew member operations<sup>21</sup>. It is essential that in multi-cabin crew operations there is one cabin crew member who undertakes the scope of the duties and responsibilities; the role requires operational experience as well as personal skills. Due to the need of one cabin crew member being in charge of coordinating all cabin-related matters with flight crew, cabin crew and any ground personnel involved in dispatching the aircraft, the regulatory requirements also specify requirements for SCCM<sup>22</sup>; the rules require the operator to nominate a SCCM when more than one cabin crew member is assigned to operate the flight. The SCCM has the responsibility to the commander for coordination of normal and emergency procedures specified in the operations manual. The requirements further include the conditions for nominating a cabin crew member to the position of a SCCM and the content of the required training.

### 2.3.1.2 Incapacitation and unavailability

Just as any human being or any aircraft occupant is prone to incapacitation, incidents/accidents also happen to SCCM whether on duty or during time off between scheduled flight duties. Time off between scheduled flight duties concerns days off or the rest period between flights scheduled on separate days and originating from the assigned crew base and the rest period at a stopover (layover) destination whilst conducting a series of flights.

In case circumstances result in the SCCM's substantiated absence from work due to e.g. sick leave, medical leave, pregnancy, maternity/paternity or parental leave, etc., the operator substitutes the employee with another employee with the same qualification in order to ensure smooth operation to comply with the applicable regulatory requirements.

If unpredictable circumstances that prevent the SCCM from reporting for the continuation of duty happen at a stopover (layover) destination, e.g. health problems, death, traffic-related accidents, law-related problems, etc., for the purpose of this NPA, the SCCM becomes *unavailable* for the scheduled duty.

Incidents/accidents also happen during a flight. They may be caused by various factors, such as medical-related, e.g. unpredictable body allergic reactions, injuries sustained during abrupt aircraft movement, when carrying out safety-related duties (e.g. securing passengers or galley during turbulence or taxiing, etc.), consequences of emergency situations (e.g. asphyxia, hypoxia, burns, injuries, etc.), sudden psychological/psychiatric deterioration, death, etc. For the purpose of this NPA, these are categorised as *incapacitation* of the SCCM during a flight duty period.

Death can occur during a flight or at a stopover (layover) destination; therefore "death" is included in both texts above - *incapacitation* and *unavailability*. Death would result in an unavailability of the SCCM. For the purpose of this task and distinguishing *incapacitation* referring to flight duty period and *unavailability* referring to unpredictable circumstances at stopover (layover) destination, both occasions example "death"; however, the terminology referring to two different occasions remains unchanged.

The operator is responsible for establishing procedures on replacement of SCCM who did not report for or cannot commence the assigned flight or series of flights originating from the assigned crew base and for establishing procedures on replacement of the incapacitated or unavailable SCCM.

<sup>21</sup> OPS 1.1002; ORO.CC.255.

<sup>22</sup> OPS 1.1000; ORO.CC.200.

### 2.3.1.3 EASA copy of ICAO ADREP data on incapacitation of SCCM

Directive 2003/42/EC<sup>23</sup> states that '*...Each Member State should set up mandatory reporting systems...Safety information should be available to entities entrusted with regulating civil aviation safety or investigating accidents and incidents within the Community and, as appropriate, to the people who may learn from them and take or initiate the necessary action to improve safety.*' The Directive in its Annex 1, A. Aircraft Flight Operations, (iii) Crew incapacitation (b) mandates Member States to report '*incapacitation of any member of the cabin crew which renders them unable to perform essential emergency duties*'.

EASA Safety Analysis and Research department conducted a research on the available data concerning incapacitation of SCCMs. The data retrieved from the EASA copy of ICAO ADREP database shows 19 occurrences from which it can be clearly identified that the reported incapacitation concerns a SCCM. There is no relation of the incidents to an aircraft type; the retrieved incidents occurred on both narrow-bodied and wide-bodied aircraft in multi-cabin crew operations, as well as in single cabin crew operations. Four of the reported events occurred on ground whilst the aircraft was parked at the gate or taxiing, one event occurred during climb, twelve events happened during cruise, one event during initial descent and one event happened during approach. The causes of the incapacitations vary and include injuries, unidentified medical reasons, injury followed by unconsciousness, food poisoning, dizziness resulting in hospitalisation, psychiatric disorder, diabetes-related insulin reaction, hypoxia caused by decompression, unconsciousness caused by prioritising the Commander and helping him to put his oxygen mask on during decompression. Five of the reported occurrences happened in the United States, thirteen in Canada and one in Europe. None of the retrieved data contains information on the follow-up – whether the incapacitated SCCM was replaced by another suitably qualified cabin crew member or the operator used any other solution. The ICAO ADREP database reflects information of the reported occurrences; however, there may be occurrences that have not been reported and, therefore, these cannot be found in the data base, such as an incident of an unidentified airline involving the need to use handcuffs and restrain a mentally disturbed passenger who posed a risk to the aircraft occupants. The SCCM was physically attacked by the passenger during cruise and also suffered a vocal cords impairment leading to a complete loss of voice. This disabled the SCCM to continue the responsibility to the commander and the cabin crew for the conduct and coordination of normal and emergency procedures, i.e. inability to communicate by speaking, only by whispering. SCCM required an on-going medical treatment at the stopover destination and was replaced by another SCCM for the return flight scheduled several days later.

Even though crew members are aware of possible risks and operators make efforts to take necessary precautions to prevent some events, some incidents/accidents happen suddenly with no previous warning and the affected individual has no influence to stop them. Such occurrences will continue to happen.

Regulatory requirements require the operator to employ a sufficient number of properly trained personnel for ground and flight operations<sup>24</sup> and to ensure that the aircraft is equipped and its crew are qualified as required<sup>25</sup>.

### **2.3.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members**

The regulatory requirements do not require cabin crew, including single cabin crew operations and SCCM, to be trained on establishing communication with aerodrome services via radio frequencies using the installed aircraft flight crew compartment instruments or by using

<sup>23</sup> Directive 2003/42/EC of the European Parliament and of the Council of 13 June 2003 on occurrence reporting in civil aviation.

<sup>24</sup> Appendix 2 to OPS 1.175(c)(1); ORO.AOC.135(b).

<sup>25</sup> OPS 1.175(n); ORO.GEN.110(d) and (e).

walkie-talkies. Urgent needs and emergencies happening on board require a rapid action and coordination with necessary entities. Some examples below are to illustrate the safety risks:

- There is usually a limited number of medical practitioners available at the airports and, taking into account the area the medical practitioner is supposed to cover, it may take some time for the doctor to arrive at the aircraft after the request has been made from the concerned aircraft. The medical condition of a passenger who is initially *'not feeling well'* may deteriorate and if there are restricted means of establishing the necessary communication, the medical condition may turn into an emergency with serious consequences.
- In case of various failures of aircraft systems, harmful or hazardous vapour concentration, fumes, smoke, noxious gases other than natural moisture released by air conditioning system may rise in the aircraft cabin during passenger boarding. These can cause short-term incapacitation of cabin crew members or passengers. Cabin crew are trained on how to act in case of various aircraft systems malfunctions and how to deal with smoke in the cabin, and the situation must be reported immediately. The situation may lead to an evacuation. The situation requires a qualified person (e.g. maintenance or flight crew) to attend to the matter which can be an urgent technical need (such as smoke resulting from the examples above coming out from the aircraft air conditioning system) or an emergency of hidden fire. If there are restricted means to establish the necessary communication requiring assistance, the situation may have serious consequences.

### 3 Objectives

The overall objectives of the Agency are defined in Article 2 of the Basic Regulation. This proposal will contribute to the overall objectives by addressing the issues outlined in Section 2. The specific objective of this proposal is therefore:

#### 3.1 Incapacitation and replacement of SCCM

The objective is to ensure that the intention of the regulatory requirement - coordination of cabin safety and of all cabin-related matters with flight crew and all ground personnel involved in dispatching the aircraft for a flight by the appropriately qualified cabin crew member - is maintained. This will be achieved by clarifying the applicable regulatory requirement to ensure that it is clearly expressed and cannot be misunderstood and/or interpreted in multiple ways by operators.

#### 3.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members

The objective is to ensure that communication can always be established between an aircraft and aerodrome services when passengers are embarking, on board or disembarking, hence preventing potentially serious consequences due to non-presence of a qualified person on board who can alert the aerodrome services in case of urgent need or emergency on board. This will be achieved by developing regulatory requirements requiring a qualified person on board the aircraft in the absence of flight crew members during ground operations with passengers embarking, on board or disembarking who will establish and coordinate communication with aerodrome services in case of urgent need or emergency.



## 4 Identification of options

### 4.1 Incapacitation and replacement of SCCM

Table 1

Option No	Description
0	<p>Baseline option. Do nothing.</p> <p>No clarification of the rule; the text of ORO.CC.200(e) remains as transposed from EU-OPS:</p> <p><i>'an operator shall establish procedures to select the next most suitably qualified cabin crew member to operate as senior cabin crew member in the event of the nominated senior cabin crew member becoming unable to operate. Such procedures must be acceptable to the Authority and take account of a cabin crew member's operational experience.'</i></p> <p>Understanding of the requirement can only be achieved by referring to several other paragraphs of the regulatory requirements:</p> <p>ORO.AOC.100(c)(3); ORO.GEN.110(d) and (e); ORO.AOC.135(b)</p>
1	<p>Clarification of the paragraph ORO.CC.200(e): <i>any</i> cabin crew member can be considered a <i>suitably qualified cabin crew member</i> to replace the SCCM who did not report for or cannot commence the assigned flight or series of flights originating from his/her assigned crew base or who became incapacitated/unavailable.</p> <p>The replacement can happen for an unlimited period of time.</p> <p>Provide explanation on what incapacitation and unavailability refer to.</p>
2	<p>Clarification of the paragraph ORO.CC.200(e): another SCCM is assigned to replace the SCCM who did not report for or cannot commence the assigned flight or series of flights originating from his/her assigned crew base; the flight does not depart without another SCCM.</p> <p>In case of incapacitation/unavailability, another SCCM replaces the incapacitated/unavailable SCCM; if there is no other SCCM who can be assigned, the cabin crew member most appropriately qualified is assigned as a replacement; the operational experience and qualification of that cabin crew member are taken into account.</p> <p>The replacement will happen without undue delay and only for the remainder of the flight or series of flights for which the SCCM, who became incapacitated/unavailable, signed in to operate when leaving his/her assigned crew base.</p> <p>Provide explanation on what incapacitation and unavailability refer to.</p>

### 4.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members

Table 2

Option No	Description
0	<p>Baseline option. Do nothing.</p> <p>No change of the regulatory requirements. A qualified person to be required on board during ground operations with passengers embarking, on board or disembarking only in cases of aircraft refuelling/defuelling or at least one member of the flight crew to be required in flight crew compartment only when the number of cabin crew has been reduced below the minimum required:</p>

	CAT.OP.MPA.195(b); AMC1 CAT.OP.MPA.195(c)(1) and (c)(2), ORO.CC.205; AMC1 ORO.CC.205(c)(1).
1	Develop a new regulatory requirement requiring a qualified person to be on board during ground operations with passengers embarking, on board or disembarking in the absence of flight crew members. The qualified person will establish and coordinate communication with aerodrome services in case of urgent need or emergency on board.

## 5 Analysis of impacts

### 5.1 Safety impact

#### 5.1.1 Incapacitation and replacement of SCCM

The role of SCCM is described in 2.3.1.1 above.

##### Option 0

The approach as outlined in Option 0 continues to provide space for misapplication of the paragraph ORO.CC.200(e), therefore a non-compliance with the associated paragraph ORO.CC.200(a)<sup>26</sup> and with the regulatory requirements referenced in the point 4.1, Option 0.

##### Option 1

The approach as outlined in Option 1, similarly to Option 0, continues to provide space for misapplication of the paragraph ORO.CC.200(e), therefore a non-compliance with the associated paragraph ORO.CC.200(b)<sup>27</sup> and the regulatory requirements referenced in the point 4.1, Option 0.

All cabin crew members undergo the qualification-required training and from the aspect of managing their own safety duties and responsibilities, there is hardly any impact, as cabin crew members are trained to manage any normal/abnormal/emergency situation.

In addition to the qualification training all cabin crew members must undergo, SCCM requires to further undergo training in accordance with ORO.CC.200(c)<sup>28</sup> covering all duties and responsibilities of a SCCM. Absence of a SCCM and replacement by any cabin crew member who lacks the required training, knowledge, experience and skills may result in ineffective CRM

<sup>26</sup> ORO.CC.200 Senior cabin crew member

(a) When more than one cabin crew member is required, the composition of the cabin crew shall include a senior cabin crew member nominated by the operator.

<sup>27</sup> ORO.CC.200 Senior cabin crew member

(b) The operator shall nominate cabin crew members to the position of senior cabin crew member only if they:

(1) have at least 1 year of experience as operating cabin crew member; and  
(2) have successfully completed a senior cabin crew training course and the associated check.

<sup>28</sup> ORO.CC.200 Senior cabin crew member

(c) The senior cabin crew training course shall cover all duties and responsibilities of senior cabin crew members and shall include at least the following elements:

(1) pre-flight briefing;  
(2) cooperation with the crew;  
(3) review of operator requirements and legal requirements;  
(4) accident and incident reporting;  
(5) human factors and crew resource management (CRM); and  
(6) flight and duty time limitations and rest requirements.

within the operating crew team and ground personnel (due to reasons mentioned in 5.3.1 below), incorrect decisions on coordination of cabin safety-related matters or incorrect actions.

#### Option 2

The training the SCCM requires to undergo in accordance with ORO.CC.200(c) covers additional aspects that will fall under the sole responsibility of the SCCM, such as communication with flight crew before take-off/landing on cabin status or entry into the flight crew compartment during phases of flight determined by the pilot-in-command or commander as safety-critical activity, etc. Option 2 ensures that the intention of the regulatory requirement - the competence required for coordination of cabin safety and of cabin-related matters with flight crew and all ground personnel involved in dispatching the aircraft for a flight - is maintained.

### **5.1.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members**

#### Option 0

Cabin crew members are trained on situational awareness, prevention of emergency situations, efficient and effective decision-making, how to deal with situations requiring immediate attention and/or emergencies, initiating and directing evacuation, etc. However, the rules do not require cabin crew to be trained on the operation of aircraft flight crew compartment installed communication system or walkie-talkies in order to establish communication with aerodrome services using radio frequencies.

The regulatory requirements concerning ground operations with passengers on board mandate the minimum required number of cabin crew to be on board. The regulatory requirements, however, do not require flight crew members to be on board (except for the case when the number of cabin crew has been reduced below the minimum required, at least one member of flight crew is required to be in the flight crew compartment).

In case of refuelling/defueling, a qualified person is required to man the aircraft in order to handle fire-related emergency procedures, communication and to initiate and direct an evacuation.

Other than the instances of refuelling/defueling and reduction of the minimum required cabin crew, a qualified person is not required to be on board during ground operations when passengers are embarking, on board or disembarking and flight crew members are absent.

There may be cases of urgent needs such as the ones exemplified in 2.3.2 above happening on board the aircraft which would require an attention of specifically qualified personnel. Ground handling personnel may not be around and cabin crew members are isolated on board with passengers with limited means of making the necessary contact, e.g. using a mobile phone to contact the operator's offices. The time is progressing and the urgent needs may turn into emergencies. Restricted means of contacting the aerodrome services for the particular assistance immediately when required may have an impact on safety of the aircraft occupants.

#### Option 1

Option 1 ensures that safety of aircraft occupants is not jeopardised by none or limited means of communicating the need for help on board the aircraft to aerodrome services when flight crew members are absent. Option 1 ensures that a qualified person will always be present on board and will have the adequate means to establish the necessary communication with aerodrome services in case of urgent need or emergency on board, hence preventing possible serious consequences.

## **5.2 Environmental impact**

No environmental impact has been identified.

## 5.3 Social impact

### 5.3.1 Incapacitation and replacement of SCCM

#### Option 0 and Option 1

Option 0 and Option 1 conclude the same social impact.

If the regulatory requirement is not interpreted correctly by the operator and *any* cabin crew member is assigned to replace the SCCM who cannot report for flight duty originating from his/her assigned crew base or who became incapacitated/unavailable, the social consequences of non-compliance or misapplication may result in an increased stress of the cabin crew member who is assigned to take over the role of SCCM. The stress may be caused by lack of self-confidence due to insufficient training, knowledge, experience, lack of required qualification, etc. This may reflect on working atmosphere, human factors and performance of cabin crew members who work with the insufficiently qualified cabin crew member who was assigned by the operator to replace the SCCM. It may reflect on flight crew and ground personnel nervous/irritated approach and attitude when dealing with a cabin crew member "in charge" who is not fully aware and trained on the scope of the SCCM's duties and responsibilities.

Furthermore, the operators who currently interpret the regulatory requirement correctly may be tempted to interpret the requirement in such a way that could lead to non-compliance, which would result in a negative social impact.

#### Option 2

Option 2 ensures that the social impact identified in Option 0 and Option 1 is prevented.

### 5.3.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members

Not relevant.

## 5.4 Economic impact

### 5.4.1 Incapacitation and replacement of SCCM

#### Option 0 and Option 1 and Option 2

Regulatory requirements mandate the operator to employ a sufficient number of properly trained personnel for ground and flight operations<sup>29</sup>. No economic impact is expected as a result of clarifying the text of the applicable regulatory requirement to prevent misapplication and non-compliance for those operators who interpret the regulatory requirement correctly. Limited economic impact related to training costs is expected for those operators who interpret the regulatory requirement in such a way that leads to non-compliance.

### 5.4.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members

#### Option 0

No change compared to the current situation.

#### Option 1

The qualified person could be e.g. cabin crew members or SCCMs, maintenance personnel, ground operations aerodrome personnel, etc. The person would require e.g. training in the use

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<sup>29</sup> Appendix 2 to OPS 1.175(c)(1); ORO.CC.135(b).

of installed flight crew compartment communication system or walkie-talkies in order to initiate a communication with aerodrome services via radio frequencies.

In the case of cabin crew members or SCCMs, such training would be included in the required operator conversion/differences training, familiarisation or, in the case of SCCM, in the SCCM training. A practical training on the communication with aerodrome services via radio frequencies using the flight crew compartment installed communication system or walkie-talkies has non-significant economic impact.

In the case of maintenance personnel: the aircraft type training for maintenance personnel includes the operation of flight crew compartment installed communication system; the aircraft type rating is endorsed in the individual's licence. No economic impact is expected with regard to aircraft type-rated maintenance personnel.

The specific task-trained maintenance personnel who do not hold the particular aircraft type rating would require such training with non-significant economic impact.

In the case of aerodrome ground operations personnel, the use of walkie-talkies is common; the training on the installed flight crew compartment communication system via radio frequencies would be required, with no significant economic impact.

No economic impact is expected in the case of utilising the qualified personnel, other than the flight crew members, required to man the aircraft in case of refuelling/defuelling when passengers are embarking, on board or disembarking.

The choice of a qualified person is sufficiently flexible and the regulatory requirement can be estimated cost-efficient.

## **5.5 Proportionality issues**

### **5.5.1 Incapacitation and replacement of SCCM**

No difference identified. SCCM is required when more than one cabin crew member is assigned by the operator to operate the flight.

### **5.5.2 Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members.**

Not relevant.

## **5.6 Impact on regulatory coordination and harmonisation**

Not relevant.

## **6 Conclusion and preferred option**

After comparison of the possible options and their impacts, the following has been concluded:

### Incapacitation and replacement of Senior cabin crew member

Option 2 has been chosen to ensure a clear understanding and correct application of the paragraph ORO.CC.200(e) by EU operators.

SCCM who does not report for or cannot commence the assigned flight or series of flights originating from his/her assigned crew base is replaced by another SCCM, thus the flight does not depart without a SCCM.

SCCM who became incapacitated/unavailable will be replaced by another SCCM; if there is no other SCCM who can be assigned, the cabin crew member most appropriately qualified will be assigned. Operational experience and aircraft types/variants qualifications will be taken into account for selection of such cabin crew member. The replacement will happen without undue delay and will be effective for a limited period as clarified in the draft rules ORO.CC.200(e).

Option 2 ensures that the intention of the regulatory requirement is maintained and the coordination of cabin safety and of cabin-related matters with flight crew and all ground personnel involved in dispatching the aircraft for a flight is conducted by the competent cabin crew member.

Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members

Option 1 has been chosen to amend the EU rules and to develop a regulatory requirement to require a qualified person on board during ground operations with passengers embarking, on board or disembarking in the absence of flight crew members. This is to ensure that safety of the aircraft occupants is maintained by having a qualified person on board the aircraft who can utilise means to communicate and can coordinate with aerodrome services in case of any urgent need or emergency happening on board the aircraft when flight crew members are absent.

## B. Draft Opinion and Decision

### I. Incapacitation and replacement of Senior cabin crew member

#### Amendment to Annex III, Part-ORO, Subpart-CC of the Commission Regulation establishing Implementing Rules for air operations:

##### ORO.CC.200 Senior cabin crew member

- (a) When more than one cabin crew member is required, the composition of the cabin crew shall include a senior cabin crew member (SCCM) nominated by the operator.
- (b) The operator shall nominate cabin crew members to the position of ~~senior cabin crew member~~ SCCM only if they:
- (1) have at least 1 year of experience as operating cabin crew member; and
  - (2) have successfully completed a senior cabin crew training course and the associated check.
- (c) The senior cabin crew training course shall cover all duties and responsibilities of ~~senior cabin crew members~~ SCCM and shall include at least the following elements:
- (1) pre-flight briefing;
  - (2) cooperation with the crew;
  - (3) review of operator requirements and legal requirements;
  - (4) accident and incident reporting;
  - (5) human factors and crew resource management (CRM); and
  - (6) flight and duty time limitations and rest requirements.
- (d) The ~~senior cabin crew member~~ SCCM shall be responsible to the commander for the conduct and coordination of normal and emergency procedures specified in the operations manual, including for discontinuing non safety-related duties for safety or security purposes.
- (e) ~~The operator shall establish procedures to select the most appropriately qualified cabin crew member to act as senior cabin crew member if the nominated senior cabin crew member becomes unable to operate. Changes to these procedures shall be notified to the competent authority.~~
- (e) The operator shall:
- (1) establish procedures to ensure replacement of the nominated SCCM by another SCCM when:
    - (i) the nominated SCCM does not report for, or cannot commence the assigned flight or series of flights originating from his/her assigned crew base. In this case the concerned flight shall not depart unless another SCCM has been assigned;
    - (ii) the nominated SCCM becomes incapacitated or unavailable. The replacement shall be assigned without undue delay for the remainder of the flight or series of flights;
    - (iii) for the purpose of (ii), if there is no other SCCM who can be assigned, the operator shall assign the cabin crew member most appropriately qualified to act as SCCM.
  - (2) notify the competent authority of any change to these procedures.

**Amendment to the Decision containing AMC and GM to Part-ORO:****AMC1 ORO.CC.200(e) Senior cabin crew member****REPLACEMENT OF THE INCAPACITATED OR UNAVAILABLE SCCM****BY ANOTHER SCCM**

Another SCCM assigned to replace the nominated SCCM needs to comply with the requirements of ORO.CC.200(b)(1) and (c).

**BY MOST APPROPRIATELY QUALIFIED CABIN CREW MEMBER**

The procedures to select the most appropriately qualified cabin crew member to replace the nominated SCCM should take into account the cabin crew member's operational experience and aircraft types/variants qualification.

**AMC1 ORO.CC.200(e)(iii) Senior cabin crew member****REPLACEMENT OF SCCM BY THE MOST APPROPRIATELY QUALIFIED CABIN CREW MEMBER**

Incapacitated SCCM can be replaced by the most appropriately qualified cabin crew member for the remainder of the flight if there is no other SCCM on the same flight. Another SCCM should be made available when the aircraft passes the next operator's base.

In case of unavailable SCCM, the operator should take into account the available time and resources at the stopover (layover) point to ensure the unavailable SCCM can be replaced with another SCCM for the remainder of the series of flights.

**GM1 ORO.CC.200(e) Senior cabin crew member****REPLACEMENT OF INCAPACITATED OR UNAVAILABLE SCCM BY ANOTHER SCCM**

To ensure that another SCCM is assigned without undue delay and that a flight or series of flights do not depart from an aerodrome where a SCCM is available or can be made available, the operator should take appropriate measures. These include, but are not limited to the following:

- (1) Utilising a SCCM assigned to another flight and available at the concerned base or stopover (layover) point if the reporting time for that flight provides sufficient time to find a replacement; or
- (2) Utilising a SCCM on standby to operate the flight or to position to the destination where the nominated SCCM has become incapacitated or unavailable to operate.

**GM2 ORO.CC.200(e) Senior cabin crew member****INCAPACITATION OR UNAVAILABILITY**

Incapacitation means a sudden degradation of medical fitness that occurs during flight duty period and precludes the SCCM from performing his/her duties.

Unavailability means unforeseen circumstances at a stopover (layover) destination that preclude the SCCM from reporting for the remainder of the series of flights, such as traffic jams that prevent the SCCM from presenting himself/herself at the crew pick-up point in time, difficulties with local authorities, health problems, death, etc. Unavailability does not refer to



absence from work due to pregnancy, maternity/paternity leave, parental leave, medical leave or sick leave.

**ORO.CC.205 Reduction of the number of cabin crew during ground operations and in unforeseen circumstances**

...

(c) Conditions:

...

(2) the reduced cabin crew includes a senior cabin crew member as specified in ORO.CC.200;

**AMC1 ORO.GEN.110(f)(h) Operator responsibilities**

ESTABLISHMENT OF PROCEDURES

...

(b) When establishing procedures and a checklist system for cabin crew with respect to the aircraft cabin, the operator should take into account at least the following duties:

Duties	Pre-take off	In-flight	Pre-landing	Post-landing
(1) Briefing of cabin crew by the <del>senior cabin crew member</del> SCCM prior to commencement of a flight or series of flights	X			

**AMC3 ORO.MLR.100 Operations manual – general**

CONTENTS – COMMERCIAL AIR TRANSPORT OPERATIONS

1 The OM should contain at least the following information, where applicable, as relevant for the area and type of operation:

A GENERAL/BASIC

...

4 CREW COMPOSITION

4.1 Crew composition. An explanation of the method for determining crew compositions, taking account of the following:

.....

(g) the designation of the ~~senior cabin crew member~~ SCCM and, if necessitated by the duration of the flight, the procedures for the relief of the ~~senior cabin crew member~~ SCCM and any other member of the cabin crew.

**AMC1 ORO.CC.115(e) Conduct of training courses and associated checking**

CREW RESOURCE MANAGEMENT- CRM INSTRUCTORS AND TRAINING PROGRAMMES

...

## (b) CRM training programmes

(1) There should be an effective liaison between flight crew and cabin crew training departments. Provision should be made to allow, whenever practicable, flight and cabin crew instructors to observe and comment on each other's training. Consideration should be given to creating films of flight deck scenarios for playback to all cabin crew during recurrent training, and to providing the opportunity for cabin crew members, particularly ~~senior cabin crew members~~ SCCM, to participate in flight crew line oriented flying training (LOFT) exercises.

...

(3) CRM training for ~~senior cabin crew member~~ SCCM

- (i) CRM training for ~~senior cabin crew members~~ SCCM should be the application of knowledge gained in previous CRM training and operational experience relevant to the specific duties and responsibilities of a ~~senior cabin crew member~~ SCCM.
- (ii) The ~~senior cabin crew member~~ SCCM should demonstrate the ability to manage the operation and take appropriate leadership/management decisions.

**GM1 ORO.CC.115(e) Conduct of training courses and associated checking**

## CREW RESOURCE MANAGEMENT (CRM)

...

## (b) General principles for CRM training for cabin crew

...

- (2) Whenever practicable, combined training should be provided to flight crew and cabin crew, particularly ~~senior cabin crew members~~ SCCM. This should include feedback.

**AMC1 ORO.CC.135 Familiarisation**

## FAMILIARISATION FLIGHTS AND AIRCRAFT FAMILIARISATION VISITS

...

## (b) Familiarisation flights

...

- (2) Familiarisation flights should be:
- (i) conducted under the supervision of the ~~senior cabin crew member~~ SCCM;

**AMC1 ORO.CC.200(c) Senior cabin crew member**

## TRAINING PROGRAMME

The ~~senior cabin crew member~~ SCCM training course should at least cover the following elements:

**AMC1 ORO.CC.200(d) Senior cabin crew member**

## RESPONSIBILITY TO THE COMMANDER

When the level of turbulence so requires, and in the absence of any instructions from the flight crew, the ~~senior cabin crew member~~ SCCM should be entitled to discontinue non-safety related duties and advise the flight crew of the level of turbulence being experienced and the need for the fasten seat belt signs to be switched on. This should be followed by the cabin crew securing the passenger cabin and other relevant areas.

**AMC1 ORO.CC.205(c)(1) Reduction of the number of cabin crew during ground operations and in unforeseen circumstances**

## PROCEDURES with REDUCED NUMBER OF CABIN CREW

- (a) During ground operations, if reducing the applicable minimum required number of cabin crew, the operator should ensure that the procedures required by ORO.CC.205 (c)(1) specify that:
- ...
- (2) a means of initiating an evacuation is available to the ~~senior cabin crew member~~ SCCM or at least one member of the flight crew is in the flight crew compartment;
- ...
- (5) the ~~senior cabin crew member~~ SCCM should have performed the pre-boarding safety briefing to the cabin crew; and

**II. Communication between a person on board the aircraft and aerodrome services during ground operations with passengers on board and in the absence of flight crew members****Amendment to Annex IV, Part-CAT of the Commission Regulation establishing Implementing Rules for air operations:****CAT.OP.MPA.195 ~~Refuelling/defuelling with passengers embarking, on board or disembarking~~ Ground operations with passengers in the absence of flight crew**

~~(a) An aircraft shall not be refuelled/defuelled with Avgas (aviation gasoline) or wide-cut type fuel or a mixture of these types of fuel, when passengers are embarking, on board or disembarking.~~

~~(b) For all other types of fuel, necessary precautions shall be taken and the aircraft shall be properly manned by qualified personnel ready to initiate and direct an evacuation of the aircraft by the most practical and expeditious means available.~~

For ground operations whenever passengers are embarking, on board or disembarking in the absence of flight crew members, the operator shall:

- (a) establish procedures to alert the aerodrome services in the event of ground emergency or urgent need; and
- (b) ensure that at least one person on board the aircraft is qualified to apply these procedures and ensure proper coordination between the aircraft and the aerodrome services.

**CAT.OP.MPA.200 Refuelling/defuelling ~~with wide-cut fuel~~**

- (a) Refuelling/defuelling with wide-cut fuel shall only be conducted if the operator has established appropriate procedures taking into account the high risk of using wide-cut fuel types.

- (b) When passengers are embarking, on board or disembarking:
- (1) an aircraft shall not be refuelled/defuelled with Avgas (aviation gasoline) or wide-cut type fuel or a mixture of these types of fuel; and
  - (2) for all other types of fuel, necessary precautions shall be taken and the aircraft shall be properly manned by qualified personnel ready to initiate and direct an evacuation of the aircraft by the most practical and expeditious means available.

**Amendment to the Decision containing AMC and GM to Part-CAT:**

**AMC1 CAT.OP.MPA.195 200(b) Refuelling/defuelling with passengers embarking, on board or disembarking**

**REFUELLING/DEFUELLING WITH PASSENGERS EMBARKING, ON BOARD OR DISEMBARKING**

OPERATIONAL PROCEDURES - GENERAL

- (a) When refuelling/defuelling with passengers on board, ground servicing activities and work inside the aircraft, such as catering and cleaning, should be conducted in such a manner that they do not create a hazard and allow emergency evacuation to take place through those aisles and exits intended for emergency evacuation.
- (b) The deployment of integral aircraft stairs or the opening of emergency exits as a prerequisite to refuelling is not necessarily required.

OPERATIONAL PROCEDURES - AEROPLANES

- (c) Operational procedures should specify that at least the following precautions are taken:
  - (1) one qualified person should remain at a specified location during fuelling operations with passengers on board. This qualified person should be capable of handling emergency procedures concerning fire protection and fire-fighting, handling communications and initiating and directing an evacuation;
  - (2) two-way communication should be established and should remain available by the aeroplane's inter-communication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the aeroplane; the involved personnel should remain within easy reach of the system of communication;
  - (3) crew, personnel and passengers should be warned that re/defuelling will take place;
  - (4) 'Fasten Seat Belts' signs should be off;
  - (5) 'NO SMOKING' signs should be on, together with interior lighting to enable emergency exits to be identified;
  - (6) passengers should be instructed to unfasten their seat belts and refrain from smoking;
  - (7) the minimum required number of cabin crew should be on board and be prepared for an immediate emergency evacuation;
  - (8) if the presence of fuel vapour is detected inside the aeroplane, or any other hazard arises during re/defuelling, fuelling should be stopped immediately;

- (9) the ground area beneath the exits intended for emergency evacuation and slide deployment areas should be kept clear at doors where stairs are not in position for use in the event of evacuation; and
- (10) provision is made for a safe and rapid evacuation.

#### OPERATIONAL PROCEDURES - HELICOPTERS

- (d) Operational procedures should specify that at least the following precautions are taken:
  - (1) door(s) on the refuelling side of the helicopter remain closed;
  - (2) door(s) on the non-refuelling side of the helicopter remain open, weather permitting;
  - (3) fire-fighting facilities of the appropriate scale be positioned so as to be immediately available in the event of a fire;
  - (4) sufficient personnel be immediately available to move passengers clear of the helicopter in the event of a fire;
  - (5) sufficient qualified personnel be on board and be prepared for an immediate emergency evacuation;
  - (6) if the presence of fuel vapour is detected inside the helicopter, or any other hazard arises during refuelling/defuelling, fuelling be stopped immediately;
  - (7) the ground area beneath the exits intended for emergency evacuation and slide deployment areas be kept clear; and
  - (8) provision is made for a safe and rapid evacuation.

#### **GM1 CAT.OP.MPA.200(a) Refuelling/defuelling with wide-cut fuel**

##### PROCEDURES FOR REFUELLING/DEFUELLING WITH WIDE-CUT FUEL

- (a) 'Wide cut fuel' (designated JET B, JP-4 or AVTAG) is an aviation turbine fuel that falls between gasoline and kerosene in the distillation range and consequently, compared to kerosene (JET A or JET A1), it has the properties of higher volatility (vapour pressure), lower flash point and lower freezing point.
- (b) Wherever possible, the operator should avoid the use of wide-cut fuel types. If a situation arises such that only wide-cut fuels are available for refuelling/defuelling, operators should be aware that mixtures of wide-cut fuels and kerosene turbine fuels can result in the air/fuel mixture in the tank being in the combustible range at ambient temperatures. The extra precautions set out below are advisable to avoid arcing in the tank due to electrostatic discharge. The risk of this type of arcing can be minimised by the use of a static dissipation additive in the fuel. When this additive is present in the proportions stated in the fuel specification, the normal fuelling precautions set out below are considered adequate.
- (c) Wide-cut fuel is considered to be 'involved' when it is being supplied or when it is already present in aircraft fuel tanks.
- (d) When wide-cut fuel has been used, this should be recorded in the technical log. The next two uplifts of fuel should be treated as though they too involved the use of wide-cut fuel.

- (e) When refuelling/defuelling with turbine fuels not containing a static dissipator, and where wide-cut fuels are involved, a substantial reduction on fuelling flow rate is advisable. Reduced flow rate, as recommended by fuel suppliers and/or aeroplane manufacturers, has the following benefits:
  - (1) it allows more time for any static charge build-up in the fuelling equipment to dissipate before the fuel enters the tank;
  - (2) it reduces any charge which may build up due to splashing; and
  - (3) until the fuel inlet point is immersed, it reduces misting in the tank and consequently the extension of the flammable range of the fuel.
- (f) The flow rate reduction necessary is dependent upon the fuelling equipment in use and the type of filtration employed on the aeroplane fuelling distribution system. It is difficult, therefore, to quote precise flow rates. Reduction in flow rate is advisable whether pressure fuelling or over-wing fuelling is employed.
- (g) With over-wing fuelling, splashing should be avoided by making sure that the delivery nozzle extends as far as practicable into the tank. Caution should be exercised to avoid damaging bag tanks with the nozzle.

**C. Appendices****Appendix A: Acronyms and definitions**

ADREP	Accident/incident data reporting system data base
AMC	Acceptable Means of Compliance
CJAA	Central Joint Aviation Authorities
CRM	Crew resource management
EASA	European Aviation Safety Agency
EC	European Commission
EU	European Union
EU-OPS	Commission Regulation (EC) No 859/2008 of 20 August 2008 amending Council Regulation (EEC) No 3922/91 as regards common technical requirements and administrative procedures applicable to commercial transportation by aeroplane
GM	Guidance Material
ICAO	International Civil Aviation Organisation
JAA	Joint Aviation Authorities
JAR-OPS	Joint Aviation Requirements for operation of commercial air transport
NPA	Notice of Proposed Amendment
OPSG	Operations Procedures Steering Group
Part-CAT	Annex IV to the Regulation on Air Operations
Part-ORO	Annex III to the Regulation on Air Operations
RIA	Regulatory Impact Assessment
RMT	Rulemaking task
SCCM	Senior cabin crew member
ToR	Terms of Reference

**D. Attachments**

Attachment 1: EASA safety analysis report for RMT.0327/0328 based on data retrieved from EASA copy of ICAO ADREP data base