European Aviation Safety Agency — Rulemaking Directorate

Notice of Proposed Amendment 2014-01

Carriage of Special Categories of Passengers (SCPs)

RMT.0269 and RMT.0270 (MDM.072 (a) & (b)) — 8.1.2014

EXECUTIVE SUMMARY

This Notice of Proposed Amendment (NPA) addresses safe carriage of Special Categories of Passengers (SCPs). In accordance with Commission Regulation (EU) No 965/2012 (CAT.OP.MPA.155), SCPs are Persons with Reduced Mobility (PRMs), infants and unaccompanied children, deportees, inadmissible passengers, or prisoners in custody. This NPA addresses the recommendations made to the Agency in a wide-ranging study by TÜV Rheinland on carriage of SCPs, which was based on the latest scientific research and published in 2009. As a result, a rulemaking task was established to review the operational and certification requirements and related Acceptable Means of Compliance (AMC) and Guidance Material (GM) related to the carriage of SCPs. This proposal establishes the following effective risk mitigating measures whenever SCPs are carried:

— Procedures and guidance material for operators to brief and provide information to specific subcategories of SCPs, their safety assistants or persons sitting next to SCPs.

— Cabin crew training elements on operator procedures, seating allocation, and passenger briefing elements whenever SCPs are carried.

— Guidelines on establishing the maximum number of SCPs to be carried.

— Guidelines on seating allocation of certain subcategories of SCPs.

— Acceptable means of compliance regarding a safety assistant, subject to clearly described conditions that are easy to apply and understand in practice.

— Definition of what constitutes a safety assistant.

The proposed changes are intended to improve the level of safety for SCPs, all other passengers and operating crew members, while fully taking into account passenger rights and anti-discrimination regulations.

Applicability		Process map	
Affected regulations and decisions:	Annex I (Part Definitions) to Commission Regulation (EU) No 965/2012 AMC/GM Part ORO AMC/GM Part CAT	Concept Paper:	No
		Terms of Reference:	17.2.2012
		Rulemaking group:	Yes
		RIA type:	Full
		Technical consultation during NPA drafting:	No
Affected stakeholders:	passengers, operators, cabin crew	Duration of NPA consultation:	3 months
		Review group:	Yes
		Comment-Response Document (CRD):	2014/Q1
Driver/origin:	Safety (Recommendations from study conducted by TÜV Rheinland)	Focussed consultation:	No
		Publication date of the Opinion:	No Opinion foreseen
Reference:	N/A	Publication date of the Decision:	2015/Q4

Table of contents

1 Procedural information

1.1 The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed this Notice of Proposed Amendment (NPA) on safe carriage of Special Categories of Passengers (SCPs) in line with Regulation (EC) No 216/2008[1] (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure[2].

This SCPs rulemaking activity is included in the Agency's Rulemaking Programme 2013-2016[3] under RMT.0269 and RMT.0270 (former task number MDM.072 (a) & (b)). This NPA is based on the Terms of Reference for RMT.0269 and RMT.0270 which were published on 17 February 2012[4].

The text of this NPA has been developed by the Agency based on the input of a rulemaking group. The rulemaking group included representatives from cabin crew organisations, operators (long-haul and short-haul), authorities and aircraft manufacturers. It is hereby submitted for consultation of all interested parties[5].

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

1.2 The structure of this NPA and related documents

This chapter contains the procedural information related to this task. Chapter 2 of this NPA (Explanatory Note) which explains the core technical content. Chapter 3 contains the proposed text for the new regulatory material. Chapter 4 contains the summary of the Regulatory Impact Assessment (RIA) showing which options were considered and what impacts were identified. Chapter 5 contains a more detailed RIA providing the detailed justification for this NPA.

1.3 How to comment on this NPA

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

---

[1] Regulation (EC) No 216/2008 of the European Parliament and the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1), as last amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 (OJ L 4, 9.1.2013, p. 34).

[2] The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See Management Board Decision concerning the procedure to be applied by the Agency for the issuing of Opinions, Certification Specifications and Guidance Material (Rulemaking Procedure), EASA MB Decision No 01-2012 of 13 March 2012.

[3] See: http://easa.europa.eu/rulemaking/annual-programme-and-planning.php

[4] See: http://easa.europa.eu/rulemaking/terms-of-reference-and-group-composition.php#MDM

[5] In accordance with Article 52 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.

[6] In case of technical problems, please contact the CRT webmaster (crt@easa.europa.eu).

The deadline for submission of comments is **8 April 2014.**

1.4 The next steps in the procedure

Following the closing of the NPA public consultation period, the Agency will review all comments.

The outcome of the NPA public consultation will be reflected in the respective Comment-Response Document (CRD).

The Agency will publish the CRD within 2 months after the consultation period has closed.

The CRD will then be open for reactions and will be followed by a subsequent Opinion, which is expected in the 4th quarter of 2014.

The Decision will contain Acceptable Means of Compliance (AMC) and Guidance Material (GM) and will be published by the Agency following the adoption of the Commission Regulation.

2 Explanatory Note

Background

Passenger travel by air has undergone numerous changes. The number of passengers who need special conditions, assistance or equipment is growing in commercial air transport. Today different passenger profiles have emerged mainly due to demographic changes and accessible fares. Travelling by air has become part of everyday life for millions of passengers, including passengers with disabilities or reduced mobility. With the number of commercial flights in Europe estimated to increase from today's 9,4 million to 25 million in 2050[7], the number of passengers is expected to grow more than two-fold and operators will have to adapt to an increasingly varied mix of passengers with different needs and abilities.

This Rulemaking activity on safe carriage of Special Categories of Passengers (SCPs) has to be seen within the framework established by Regulation (EC) No 1107/2006[8], which ensures that passengers with disabilities or reduced mobility (PRMs) have equal access to air transport. It establishes the principle of anti-discrimination in air transport, encompassing the full journey from the time the passenger books a ticket up to the time the passenger exits from the airport of his or her final destination.

This Rulemaking activity on safe carriage of SCPs has been triggered by requests from stakeholders, that safety requirements for carriage of SCPs should be established at European level. A study commissioned by the Agency and conducted by TÜV Rheinland[9] published a number of recommendations to mitigate the increased risk due to carriage of SCPs.

This NPA addresses concerns of European disability groups and the European Commission[10], who have received complaints about inconsistent requirements and different policies across Europe, creating a barrier to air travel. An extensive study financed by the European Commission on the implementation and enforcement of Regulation (EC) No 261/2004 on air passenger rights stated that: '*the Commission should work with EASA to determine safe policies on carriage of PRMs, in particular to address the wide and unjustifiable variation in airline policies on carriage of PRMs (in particular on numerical limits and circumstances under which PRMs are required to be accompanied)*'[11].

---

[7] Flightpath 2050, Europe's Vision for Aviation Report of the High Level Group on Aviation Research, EUROPEAN COMMISSION Directorate-General for Research and Innovation Directorate General for Mobility and Transport, page 8.

[8] Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air (OJ L 204, 26.7.2006, p. 1).

[9] TÜV Rheinland study on Carriage by Air of Special Categories of Passengers. EASA Contract Number EASA.2008.C.25. 1 December 2009.

[10] See European Commission press release IP/12/602, which states that one of the persistent problems of implementation of Regulation (EC) No 1107/2006 are 'unjustified refusals <and> passengers report<ing> recurring problems with refusals and inconsistent requirements for <..> passengers to be accompanied'

[11] 'Evaluation of Regulation 261/2004' by Steer Davies Gleave on the application and enforcement of the Regulation on air passengers' rights in the EU Member States, June 2010, p. 5.

Definition of Special Categories of Passengers

As regards the legal framework, special categories of passengers (SCPs) are defined in Commission Regulation (EU) No 965/2012 on technical rules for air operations (hereinafter referred to as the 'Air OPS Regulation') as persons who need special conditions, assistance, or equipment when travelling by air.

CAT.OP.MPA.155 of the Air OPS Regulation defines SCPs as persons requiring special conditions, assistance and/or devices when carried on a flight, such as:

(a) persons with reduced mobility (PRMs) who, without prejudice to Regulation (EC) No 1107/2006, are understood to be any person whose mobility is reduced due to any physical disability, sensory or locomotory, permanent or temporary, intellectual disability or impairment, any other cause of disability, or age;

(b) infants and unaccompanied children; and

(c) deportees, inadmissible passengers or prisoners in custody.

Operational procedures applying to SCPs

Apart from defining the term 'Special Category of Passengers (SCPs)', the Air OPS Regulation also establishes that SCPs shall not be seated in emergency exit rows[12].

Additionally, the Agency Decision[13] accompanying the Air OPS Regulation contains an Acceptable Means of Compliance (AMC)[14], which lists the following factors that operators should consider when carrying SCPs:

(a) the aircraft type and cabin configuration;

(b) the total number of passengers carried on board;

(c) the number and subcategories of SCPs, which should not exceed the number of passengers capable of assisting them in case of an emergency evacuation; and

(d) any other factor(s) or circumstances possibly impacting on the application of emergency procedures by the operating crew members.

The maximum limit of SCPs contained in (c) above is, therefore, only one out of the four elements to be considered when carrying SCPs. For certain operations, depending on the aircraft type used, a lower limit would theoretically be possible. The Air OPS Regulation will apply in all EU Member States as of 28 October 2014.

---

[12] CAT.OP.MPA.155 (c) ensures that SCPs shall not be allocated, nor occupy, seats that permit direct access to emergency exits or where their presence could:(1) impede crew members in their duties; (2) obstruct access to emergency equipment; or (3) impede the emergency evacuation of the aircraft.

[13] Decision 2012/018/R of the Executive Director of the Agency of 24 October 2012 on acceptable means of compliance and guidance material to Commission Regulation (EU) No 965/2012 of 5 October 2012 – Acceptable means of compliance and guidance material to Annex IV – Part CAT

[14] AMC1 CAT.OP.MPA.155(b)

At the time of this NPA, the Air OPS Regulation does not yet apply in EU Member States. Until the end of the transition period of October 2014, EU OPS rules apply. EU OPS[15] rules, as well as the future Air OPS Regulation, do not contain a precise limit on the maximum number of SCPs on board. Therefore, safety requirements regarding the carriage of SCPs are today governed by EU OPS and different national requirements. As a result, some national authorities refer to Guidance Material of the now disbanded Joint Aviation Authority (JAA) with regard to the maximum number of PRMs on board. This JAA Guidance Material[16] is also referred to as Interpretative/Explanatory Material (IEM) contained in the Temporary Guidance Leaflet (TGL) 44. Some Member States have introduced precise maximum limits of certain SCPs on board, while others have not. Some have published detailed guidance material on how the JAA Guidance Material should be interpreted, while others have not. In the absence of clear safety requirements at EU level, many operators, who fly to the United States, apply the US Department of Transport's Disability Rights requirement.

How did the Agency embark on this rulemaking task?

Against this background, a rulemaking group with members representing experts from aircraft manufacturers, aviation authorities, cabin crew training specialists, air operator representatives with short- and long-haul operations, and trade union representatives was established to assist the Agency in preparing this NPA.

In order to ensure safe operations of aircraft, the rulemaking group proposed effective mitigating measures to address the increased safety risks whenever SCPs are on board. The mitigating measures contained in this NPA address briefing of passengers, training of cabin crew, seating allocations, and when a safety assistant would be needed.

The measures proposed by this NPA are based on a scientific study on the carriage of SCPs commissioned by the Agency. The final report of this study, conducted by TÜV Rheinland, was delivered in December 2009, and has been published on the Agency's website[17]. The comprehensive TÜV Rheinland study includes updated scientific data and a methodological risk assessment of safety risks that could be associated with the carriage of SCPs. Identified risks, as well as the combination of risks, were assessed in the course of the study. The risk assessment covered 272 scenarios for 17 special categories of passengers. Completed with the support of experts, the study also comprised research and analysis of available data, including studies already published relevant to the subject and

[15] OPS 1.260 in Council Regulation (EEC) No 3922/91 as regards common technical requirements and administrative procedures applicable to commercial transportation by aeroplane.

[16] ACJ (Advisory Circular Joint) OPS 1.260: Carriage of [P]ersons with Reduced Mobility 1 A person with reduced mobility (PRM) is understood to mean a person whose mobility is reduced due to physical incapacity (sensory or locomotory), an intellectual deficiency, age, illness or any other cause of disability when using transport and when the situation needs special attention and the adaptation to a person's need of the service made available to all passengers. 2 In normal circumstances PRMs should not be seated adjacent to an emergency exit. 3 In circumstances in which the number of PRMs forms a significant proportion of the total number of passengers carried on board: a. The number of PRMs should not exceed the number of able-bodied persons capable of assisting with an emergency evacuation; and b. The guidance given in paragraph 2 above should be followed to the maximum extent possible.

[17] http://www.easa.eu.int/rulemaking/docs/research/EASA%202008.C.25%20Final%20report%20Issue%201.1.pdf

accident/incident investigation reports, as well as the conduct of partial evacuation tests and various contacts with concerned groups/parties. Ultimately, the final report proposes recommendations and identifies accordingly where further research and/or rulemaking action might be needed, from both operational and certification perspectives, in the interest of passenger safety.

As a result of stakeholders' requests and of recommendations from the TÜV Rheinland study, the Agency included rulemaking tasks RMT.0269 and RMT.0270 on carriage of Special Categories of Passengers into its Rulemaking Programme to address the issue with a view to updating, as appropriate, the current existing Implementing Rules and/or Guidance Material.

When drafting this NPA, the rulemaking group carefully evaluated the impact of the regulatory solutions envisaged by developing a comprehensive Regulatory Impact Assessment (RIA) encompassing flight and passenger safety as well as other relevant aspects, such as economic, social aspects and impacts on regulatory coordination.

The rulemaking group also evaluated the interaction with passenger rights regulations, such as Regulation (EC) No 1107/2006 and met with important stakeholders, such as the European Disability Foundation (EDF) and the European Commission's passenger rights unit in DG MOVE. The rulemaking activity was also presented to the ECAC Facilitation subgroup on PRMs. The rulemaking group took into consideration relevant recent and publicly available scientific and/or medical studies/evaluations.

Finally, the scope of this proposal is limited to commercial air transport (CAT) with aeroplanes. CAT operations with other categories of aircraft (e.g. helicopters, sailplanes, and balloons) as well as non-commercial operations are not addressed with this rulemaking activity. Both commercial and non-commercial (air transport) operations with helicopters, sailplanes, and balloons are mostly conducted with smaller-sized aircraft with smaller cabin and less frequent travel by SCPs. In most of those operations, cabin crew are not on board and the flight crew assumes some of the duties of cabin crew with regard to briefing of passengers. To this end, the AMC material accompanying the Air OPS Regulation already foresees a dedicated training of the flight crew on seating of SCPs for operations conducted without cabin crew[18]. Since existing AMC accompanying Part CAT rules also addresses carriage of SCPs for CAT operations with aeroplanes without cabin crew, this proposal does not include a detailed regulatory proposal for those operations and, therefore, relies on the operator's management system to address the additional risks stemming from carriage of SCPs.

2.1 Overview of the issues to be addressed

The rulemaking group addressed all of the objectives of the Terms of Reference to this Rulemaking task, which included the recommendations from the 2009 TÜV Rheinland study on the carriage of SCPs, in particular the recommendation regarding operational and

[18] See training syllabus for flight crew in AMC1 ORO.FC.220 (ED Decision 2012/017/R), which states in (f)(3) that for operator conversion training and checking 'particular emphasis should also be given on the seating of special categories of passengers.'

certification safety requirements and regulatory material, in the form of Implementing Rules (IR)/Alternative Means of Compliance (AltMOC) or GM relating to carriage of SCPs.

The Terms of Reference excluded the subcategory of inadmissible passengers, deportees or persons in custody from the scope of the rulemaking task since there is no significant increased risk for this subcategory.

When looking at the safety risks stemming from carriage of other SCPs, the rulemaking group agreed with the assessment of the TÜV Rheinland study, which concluded that passengers on stretchers, children, infants, extremely overweight passengers, and non-ambulatory passengers bear the highest risk to themselves. The highest risk to other passengers, whenever SCPs are carried, is induced by non-ambulatory passengers, extremely obese passengers, passengers on stretchers and passengers with very low mobility[19].

Regarding safety risks for smaller children, and particularly the use of child restraint devices, e.g. car seats, to mitigate the safety risks, the rulemaking group agreed to await the ICAO deliberations on child restraint devices, since ICAO has responded positively to the request by EASA to develop a global policy on child restraint devices.

Regarding accident investigation and research, today's standards for recording of accident data to enable detailed investigation of evacuation procedures do not contain sufficient information on the conditions of surviving SCPs or their seating allocation and those around them at the time of the incident/accident. The TÜV Rheinland study stated that today's accident investigations mostly focus on the root causes of an accident and less on means to improve the survivability, e.g. by investigating design factors that would improve survivability. The rulemaking group did not agree fully with the recommendations of the TÜV Rheinland study. However, the rulemaking group agreed that accident and incident investigation questionnaires should be improved to include information on evacuation of all passengers with focus on disabled passengers as it relates to this rulemaking effort. The recommendations below are in line with the policy of safety management, which moves away from using data in a reactive manner to understand the causes of accidents and incidents, towards a proactive approach in which accident data is analysed to identify and mitigate risks to prevent future accidents as part of the SMS policy of safety risk management.

As a result, data that can be used to help identify accident and incident precursors — such as data on surviving SCPs and those passengers around them — should become more critical for accident prevention. Also ECAST is now moving beyond the forensic approach of examining past accident data to a more proactive approach that will focus on risk prediction and mitigation strategies[20]. Shifting to a data-driven, risk-based safety oversight approach means that authorities and operators need appropriate, complete, and accurate data, to be able to identify system-wide trends and manage emerging risks.

---

[19] TÜV Rheinland study, page 158.

[20] ECAST, launched in October 2006, is a partnership between EASA, other European regulators, and the aviation industry. It aims at further enhancing commercial aviation safety in Europe, and for European citizens worldwide.

The rulemaking group stated that the following recommendations on improved accident investigation reports are deemed to be important to obtain better data related to SCPs travelling by air and should be further investigated:

— Improve existing standards for recording of accident data to enable detailed investigation of evacuation procedures related to SCPs evacuation.

— Conduct research on how accident investigation questionnaires can be harmonised with the accident databases to obtain the broadest possible spectrum of statistically significant data.

— Investigate statistical relevant data on SCPs evacuation (e.g. combined effects of crowd control by the cabin crew and the influence on SCPs evacuation). Gather data through evacuation tests (e.g. delay of evacuation per category of disability). Specify a criterion for an acceptable increase of risk (e.g. relating to the evacuation delaying effects of SCPs. Risk acceptance criteria can be used to limit the number of SCPs on board aircraft.

— More research on stretcher evacuation. This research could then be included into future training and operational manuals.

— The survey of eyewitness reports should be structured and standardised.

— More research is recommended on exit configurations and optimisation of aisle width regarding SCP evacuation.

2.2 Objectives

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Chapter 2 of this NPA. The specific objective of this proposal is to improve the level of safety for SCPs, all other passengers, as well as operating crew members whenever SCPs are carried on board.

The aim of the RIA is to determine the safest option to achieve the objective of this rulemaking activity while minimising potential negative social or economic impacts to individual passenger groups or operators. Impacts to regulatory coordination with third countries have also been assessed. The RIA consists of a series of five logical steps that structure the analysis: issue identification, objective definition, option development, impact analysis, and option comparison. By providing transparent and evidence-based analysis of the advantages and disadvantages of the rule options against the defined objectives, decision-makers and stakeholders have a solid reference framework for discussion and informed evidence-based decisions.

2.3 Summary of the Regulatory Impact Assessment (RIA)

The RIA addresses a number of effective risk mitigating measures that will improve safety of all passengers whenever SCPs are on board:

(a) Adequate briefing for some SCPs, e.g. on most suitable exits, will improve safety, because the briefing will prevent delays in eventual evacuation or delaying behaviour in an emergency situation, which presents a safety risk for the SCPs and all other passengers:

— *This NPA proposes new guidance on passenger briefing items for some specific SCPs, who will benefit from tailored briefing.*

(b) Better training of cabin crews will improve safety:

— *This NPA proposes that cabin crew's recurrent training covers the specific procedures established by the operator for the safe carriage of SCPs on :*

- *passenger briefing;*
- *passenger seating; and*
- *operator procedures in emergency situations and in case of evacuation.*

— *The NPA proposes to complete training within a three-year cycle unless the operator determines that such training is to be completed at shorter intervals, taking into account the route structure, passenger profiles, aircraft types operated, and seasonal demands and operations.*

(c) Inappropriate seating of certain SCPs has been identified by the TÜV Rheinland study as a major safety risk, because it can hinder or seriously delay quick evacuation of passengers. In addition, group seating of obese passengers in the same seat row could put additional strain on the seat structure with safety risks to the SCPs themselves and passengers sitting in the vicinity:

— *This NPA proposes guidance on seating allocation of specific SCPs to ensure that SCPs are distributed evenly throughout the cabin and that they are surrounded by the maximum number of passengers capable of assisting in case of an emergency. This NPA also ensures that the safety procedures of unaccompanied minors apply to children travelling in another class of cabin than their accompanying adult.*

— *Finally, the NPA proposal ensures that seating in the same row in the case of obese passengers should be avoided to ensure that the seat structure, can better resist the additional strain.*

(d) Today, safety requirements for safety assistants, i.e. accompanying persons or safety assistants, differ across operators and Member States. The variety of different requirements is confusing and has been identified by the European Commission as an area in need of EU-wide safety requirements. A recent study financed by the European Commission stated that: 'the Commission should work with EASA to determine safe policies on carriage of PRMs, in particular to address the wide and unjustifiable variation in airline policies on carriage of PRMs (in particular on numerical limits and circumstances under which PRMs are required to be accompanied)'[21]. Regulation (EC) No 1107/2006 prohibits an operator from refusing carriage to a Person with reduced mobility (PRM), i.e. an SCP. However, an operator may derogate from this provision in order to meet applicable international, EU or national safety requirements or if the size of the aircraft or its door makes embarkation or carriage physically impossible. This interpretation has been

[21] 'Evaluation of Regulation 261/2004' by Steer Davies Gleave on the application and enforcement of the Regulation on air passengers' rights in the EU Member States, June 2010, p. 5.

confirmed by the European Commission's interpretative guidelines on the application of Regulation (EC) No 1107/2006[22], which states that *'air carriers can require PRMs to travel with a safety assistant only for safety reasons'*. Those guidelines are not binding but aim to clarify unclear provisions of the Regulation. Along the lines of the European Commission's interpretative guidelines on Regulation 1107/2006, this NPA proposes that an SCP should only be required to travel with a safety assistant, when it is evident that the SCP is not self-reliant and carriage could pose a safety risk to himself or herself or other passengers. Typically this will be the case when the SCP is unable to:

(a) unfasten their seat belt, or
(b) leave their seat and reach an emergency exit unaided, or
(c) retrieve and fit a life jacket, or
(d) fit an oxygen mask without assistance, or
(e) follow the safety briefing and instructions given by the crew in an emergency situation.

— *This NPA proposes procedures relating to SCPs travelling with a safety assistant.*

— *This NPA proposes a definition of safety assistant and establishes Acceptable Means of Compliance (AMC) when a safety assistant could be required in limited cases.*

(e) Finally, safety risks stemming from certification requirements, such as evacuation test requirements, and specific certification elements, such as minimum number of cabin crew, number and position of cabin crew stations, aisle width, size of emergency exit doors, access to exits considering evacuation of SCPs, have also been assessed in this NPA. When compared to the safety risk mitigating measures mentioned above, e.g. briefing, training, seating and safety assistants in limited cases, this NPA concludes that a change in certification requirements whenever SCPs are carried is not called for due to the following reasons:

— *Other m*itigating *measures (see above) are already believed to be highly effective.*

— *Certification test requirements are distinct from operational real-life emergency scenarios.*

— *A change in harmonised certification requirements could jeopardise the aviation system, which is built on harmonised certification benchmarks and the data obtained from harmonised certification tests.*

— *Changes to evacuation test requirements would disregard new materials used inside the cabin, e.g. more fire-resistant materials that have further decreased the catastrophic risk of rapid fire build-up inside the cabin, which in some cases have proven to allow for additional evacuation time.*

[22] European Commission, STAFF WORKING DOCUMENT, Interpretative Guidelines, on the application of Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air, 11 June 2012, p. 8

— *Changes to certification requirements regarding the minimum number of cabin crews have been disregarded due to other mitigating measures being more effective and given that the role of cabin crew during an evacuation is to manage and oversee the overall evacuation.*

For a more detailed analysis of the issues addressed by this proposal, please refer to the RIA.

2.4 Overview of the proposed amendments

As a result of the RIA, this NPA proposes AMC to operational rules for CAT operators in the following four areas:

(a) Targeted passenger briefing for some SCPs will improve evacuation and passenger behaviour during emergency situations.

(b) Inclusion of the operator's SCP procedures into (recurrent) cabin crew training will ensure that cabin crew are trained to apply the operator's procedures with regard to SCPs.

(c) Better seating allocation for some specific SCPs has been identified by the TÜV Rheinland study as a major risk mitigating measure, because the evacuation delaying effect of several SCPs evacuating at the same time is avoided, while surrounding the SCP with passengers capable of assisting in case of an emergency will increase the evacuation speed and avoid bottlenecks in the aisle.

(d) A safety assistant in some limited cases, for those SCPs, who are unable to:

(1) unfasten their seat belt, or

(2) leave their seat and reach an emergency exit unaided, or

(3) retrieve and fit a life jacket, or

(4) fit an oxygen mask without assistance, or

(5) follow instructions given by the crew in an emergency situation.

This NPA does not foresee any changes to the existing Implementing Rules of the Air OPS Regulation.

In addition, this NPA proposes a proportionate set of measures that are adequate for the different types of operations for the following reasons:

— The focus of this NPA lies on proposals for commercial air transport (CAT) operations with aeroplanes, used by the majority of SCPs.

— Non-commercial operations are outside the scope of this NPA, since they do not carry fee-paying passengers.

— CAT operations with non-motor powered aircraft (e.g. sailplanes and balloons) will be regulated by future amendment to Implementing Rules as a result of the Agency's

Opinion No 03/2012[23] on sailplane and balloon operators and A-to-A flights. With regard to SCPs, those future requirements foresee that 'SCPs shall be carried under conditions that ensure the safety of the aircraft and its occupants according to procedures established by the operator'[24]. The future IRs for balloon operations also foresee that when a balloon carries more than 19 passengers, at least one additional crew member appropriately experienced and trained shall be present on board to assist passengers in the event of an emergency.

– CAT operations with helicopters are mostly conducted without cabin crew. In these cases, existing requirements ensure that flight crew are trained on carriage of SCPs, e.g. seating of SCPs[25].

[23] See http://easa.europa.eu/agency-measures/opinions.php#2012

[24] See CAT.OP.NMPA.115 Carriage of special categories of passengers (SCPs)

[25] AMC1 ORO.FC.220 Operator conversion training and checking ensures that flight crew are trained on passenger handling for operations where no cabin crew is required. This includes training on the importance of correct seat allocation with reference to aircraft mass and balance with a particular emphasis on the seating of special categories of passengers.

Table 1 – Retained options and proposed AMC and GM

Proposed risk mitigating measure	Proposed Acceptable Means of Compliance/Guidance Material
PASSENGER BRIEFING	
SCP Briefing procedures Amend Part CAT to require the operator to establish procedures for the pre-flight briefing of SCPs and their safety assistants regarding their respective safety responsibilities in normal and emergency situations. The procedures should specify the timing when and the method how the briefing can be provided to the SCPs and their safety assistants. Additional GM on briefing content for specific SCPs.	AMC2 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)/SCP BRIEFING PROCEDURES GM1 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)/SCP BRIEFING PROCEDURES
Develop procedure for planned emergency evacuation. In a planned emergency, if time permits, passengers identified by the cabin crew as capable of assisting SCPs should be briefed on the assistance they can provide to them.	GM3 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)/BRIEFING PROCEDURE IN A PLANNED EMERGENCY
CABIN CREW TRAINING	
Amend applicable cabin crew training programmes in AMC to Part ORO for conversion training and recurrent training. (a) Recurrent training on normal and emergency procedures should cover the specific procedures established by the operator for the safe carriage of SCPs. (b) The operator should take into account the safety risk assessment completed in accordance with ORO.GEN.200 to determine if recurrent training on these SCP procedures should be completed annually or within a three-year cycle.	AMC1 ORO.CC.140(b) Aircraft type specific training and operator conversion training/ TRAINING PROGRAMME – OPERATOR CONVERSION TRAINING
SEATING ALLOCATION	
Maximum number of SCPs on board	

Amend existing AMC1 CAT.OP.MPA.155(b) point (c) to delete the word 'evacuation'. This is to ensure that all emergency situations are taken into account when establishing the operator's procedure for carriage of SCPs. Develop further guidance to AMC1 CAT.OP.MPA.155(b) of the Air OPS Regulation. This guidance should explain the meaning of 'passenger capable of assisting with an emergency evacuation', by stating that those passengers are passengers without another role that would prevent them from assisting the SCP.	Amend existing AMC1 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs) GM2 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)/PROCEDURE TO ESTABLISH THE MAXIMUM NUMBER OF SCPs
Seating allocation for specific SCPs	AMC1 CAT.OP.MPA.155(c) Carriage of special categories of passengers (SCPs)/SEATING OF SPECIAL CATEGORIES OF PASSENGERS
1. A safety assistant should be seated next to the SCP where it is most convenient to assist the SCP.	
2. If the SCP is unable to negotiate stairs within the cabin unaided and swiftly, he or she should not be seated on the upper deck of multi-deck aircraft if the exits are not certified for emergency evacuation on both land and water.	
3. Group seating of non-ambulatory SCPs and extremely obese passengers should be avoided. They should be allocated seats distributed throughout the cabin to ensure that each SCP is surrounded by the maximum number of passengers capable of assisting in an emergency.	GM1 CAT.OP.MPA.155(c) Carriage of special categories of passengers (SCPs)/GROUP SEATING OF SPECIAL CATEGORIES OF PASSENGERS
4. Where SCPs cannot be distributed throughout the cabin, the operator should have procedures to deal with the increased safety risk.	
5. Additional guidelines for specific subcategories of SCPs (unaccompanied children, passengers travelling with children up to 12 years, extremely obese passengers, passengers with physical disability of the upper limbs or with a disability of both the upper and lower limbs, passengers travelling with a recognised assistance dog, stretcher occupants).	GM2 CAT.OP.MPA.155(c) Carriage of special categories of passengers (SCPs)/SCP BRIEFING PROCEDURE

6. If the SCP is using a disability and/or restraint aid that requires it to be secured around the back of a seat, he/she should be seated in a seat without posing a safety risk to the passenger seated in the vicinity.	GM3 CAT.OP.MPA.155(c) Carriage of special categories of passengers (SCPs)/SEATING ALLOCATION OF SCPs WITH A DISABILITY RESTRAINT AID
7. Additional AMC to ensure that a child up to the age of twelve years, separated from the accompanying adult(s), who is (are) travelling in another cabin class, should be regarded as an unaccompanied child in accordance with the applicable procedures established by the operator.	AMC4 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)/CONDITIONS OF SAFE CARRIAGE FOR CHILDREN TRAVELLING IN A DIFFERENT CABIN CLASS
SAFETY ASSISTANT	
1. Establish new AMC to Part CAT based on the UK Code of Practice. An SCP should only be required to travel with a safety assistant, when it is evident that the SCP is not self-reliant and carriage could pose a safety risk to himself or herself or other passengers. Typically this will be the case when the SCP is unable to: (a) unfasten their seat belt, or (b) leave their seat and reach an emergency exit unaided, or (c) retrieve and fit a life jacket, or (d) fit an oxygen mask without assistance, or (e) follow the safety briefing and instructions given by the crew in an emergency situation.	AMC3 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)/CONDITIONS TO ENSURE SAFETY OF THE AIRCRAFT AND ITS OCCUPANTS
When carrying an unaccompanied child that is not self-reliant, the operator should assess the safety risks of those unaccompanied children to ensure that they are assisted in case of emergency situations.	AMC4 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)/CONDITIONS OF SAFE CARRIAGE FOR UNACCOMPANIED CHILDREN TRAVELLING
A new definition in GM to Annex I (Definitions) to the Air OPS Regulation. Safety assistant means a passenger, accompanying an SCP, who is at least 16 years old, and is physically and mentally able to: (a) follow crew instructions, (b) react in an appropriate manner in an emergency situation on board the aircraft, and (c) assist in an emergency situation and in the evacuation of the SCP.	New GM including a new definition of safety assistant in GM to Annex I (Definitions)

2.5 Open questions to stakeholders

While developing the RIA, and reviewing available scientific research, the Agency identified a number of questions where input from stakeholders would be welcome to supplement existing research.

Question No 1 on briefing of safety assistants for stretcher occupants

This proposal includes GM on briefing the safety assistant of the stretcher occupant to disconnect medical equipment and leave the equipment behind. This GM is based on the recommendation of the TÜV Rheinland study that 'stretcher patients should be evacuated without the stretcher and that vital medical devices (respiration apparatus, infusions) mounted on the stretcher should be removable and mobile. <…> The ability to evacuate a stretcher via a slide was not proven according to the present knowledge. Sharp edges on the stretcher may damage the slide. Furthermore the behaviour of a stretcher on a slide and during leaving the slide is not known.' The study recommends further investigations regarding evacuation of stretcher patients.

The Agency invites stakeholders to comment on the proposed new GM1 CAT.OP.MPA.155(b) on evacuation of stretcher patients.

Question No 2 on a maximum number of SCPs on board

The existing AMC of the Air Ops Regulation (AMC1 CAT.OP.MPA.155(b)) establishes a list of factors that operators should consider when carrying SCPs, such as:

(a) the aircraft type and cabin configuration;

(b) the total number of passengers carried on board;

(c) the number and subcategories of SCPs, which should not exceed the number of passengers capable of assisting them in case of an emergency evacuation; and

(d) any other factor(s) or circumstances possibly impacting on the application of emergency procedures by the operating crew members.

The maximum number of SCPs contained in (c) above is, therefore, only one out of four elements to be considered when carrying SCPs. For certain operations, depending on the aircraft type used, a lower limit would theoretically be possible.

The TÜV Rheinland study stated that existing research does not provide evidence to establish a precise maximum limit for SCPs or for a certain fixed number of certain subcategories of SCPs, e.g. four (4) wheelchair passengers, on a given flight. Some stakeholders have requested that the Agency proposes such a precise limit, e.g. four (4) wheelchair passengers on a given flight.

The Agency invites stakeholders to comment on whether there is a need to define a further limit than the one already contained in AMC1 CAT.OP.MPA.155(b) which states that the operator should take into account a number of factors when carrying SCPs, including the factor that the number and subcategories of SCPs should not be greater than the number of passengers capable of assisting.

Question No 3 on proposed AMC for a safety assistant

Where this proposal addresses a safety assistant in certain limited cases, it is based on Article 4(1) of Regulation (EC) No 1107/2006, which stipulates that an air carrier may only refuse carriage to a PRM in order to meet applicable safety requirements (or if the size of the aircraft or its door makes embarkation or carriage physically impossible). This proposal includes new AMC, describing under which conditions a safety assistant could accompany the SCP. The wording of the new AMC in this NPA is based on the UK's Code of practice and states that SCPs should only be required to travel with a safety assistant, when it is evident that they are not self-reliant and their carriage could pose a safety risk to themselves, the crew or other passengers. This NPA proposes a safety assistant for passengers who are unable to:

(a) unfasten their seat belt, or

(b) leave their seat and reach an emergency exit unaided, or

(c) retrieve and fit a life jacket, or

(d) fit an oxygen mask without assistance, or

(e) follow instructions given by the crew in an emergency situation.

Stakeholders are invited to comment on the content of this new AMC.

Question No 4 on definition of safety assistant

This proposal includes a new definition of 'safety assistant' as a newly proposed GM to Annex I (Definitions) to the Implementing Rules of the Air OPS Regulation. Do stakeholders agree with the proposed definition? Could it be misunderstood or should it be extended? In addition, the Agency proposal includes a minimum age of 16 years for the safety assistant. Stakeholders are requested to advise the Agency whether a minimum age is a realistic measure and whether 16 years is an adequate age when considering the responsibility of being responsible for a passenger, e.g. a passenger who cannot evacuate on his or her own.

Stakeholders are invited to comment on the definition of a safety assistant and the proposal to establish a minimum age of 16 years for the safety assistant.

Question No 5 on alternative means to restrain severely disabled children during flight

Annex II to Regulation (EC) No 1107/2006 on the rights of disabled persons and persons with reduced mobility when travelling by air requires that operators 'must make all reasonable efforts to arrange seating to meet the needs of individuals with disability or reduced mobility on request and subject to safety requirements and availability'. Today's safety requirements do not allow a child over the age of two to occupy the same seat as their parent/guardian (CAT.OP.MPA.225 (b)(2) Seats, safety belts and restraint systems). In the case of severely disabled children, some children cannot be safely

restrained in their own seat. Also, they may have limited ability to sit upright unaided or to use an aircraft seat and safety belt effectively. Despite being above the age of two, the child can weigh less and be much smaller than other children of the same age. For those severely disabled children, a change to the Implementing Rule requirements in CAT.OP.MPA.225(b) would enable them to travel, e.g. by using a loop-belt and occupying the same seat as their parent/guardian. One Member State has requested the Agency to allow such children, over the age of 2 years, to be seated on the same seat as their parent/guardian, utilising a restraint aid, such as a supplementary loop-belt during taxi, take-off and landing (and any other times as the pilot-in-command deems necessary). The Member State argues that this is the preferred method as it is the most comfortable method to accommodate the safety needs of the disabled child. However, this practice is contrary to the requirement that children over the age of 2 must occupy their own seat. Since the multi-occupancy would only be needed for restraint during taxi, take-off, and landing (and any other times as the pilot-in-command deemed necessary) so a further consideration is whether operators should ensure that a separate seat is provided for the use of the child during other phases of flight e.g. in the cruise when the seat belt signs are not illuminated. The separate seat could still be used by the child in the cruise and would remove the necessity for the severely disabled child to remain on the parents' lap for the duration of the flight. In addition, for operators who have maximum seating, if the separate seat was utilised by someone else it could take the Maximum Passenger Seating Capacity (MPSC) over that at which the aircraft has been certificated. A change to the rules would allow the child to travel. The change to the requirements of the Implementing Rule should be subject to the following conditions:

(a) It shall only be relied on in respect of children, aged two years or more, who because of physical disability cannot be properly secured in their own seat using the aeroplane safety belt.

(b) It shall only be relied on if the operator has satisfied itself that the child cannot be secured using any other supplementary restraint device, support, or comfort aid that can reasonably be made available.

(c) The operator must satisfy itself that having regard to the size and weight of the child, the child may be satisfactorily restrained.

(d) The operator shall specify in its operations manual which aircraft seats can be used for the purpose of this exemption.

(e) The commander shall ensure that the child is restrained by a child-restraint device, e.g. a supplementary loop or other restraint device.

Stakeholders are invited to comment on this proposal to change the existing Implementing Rules (IRs) via a separate Agency Opinion and to exempt severely disabled children above the age of two from the requirement to occupy their own seat during taxi, take-off, and landing and any other times as the pilot-in-command deems necessary.

Stakeholders are also invited to comment on whether operators should ensure that a separate seat is provided for the use of the child at other times in flight.

3 Proposed amendments

The text of the amendment is arranged to show deleted text, new or amended text as shown below:

(a) deleted text is marked with ~~strike through~~;

(b) new or amended text is highlighted in grey;

(c) an ellipsis (…) indicates that the remaining text is unchanged in front of or following the reflected amendment.

3.1 Draft EASA Decision proposed changes to ED Decision 2012/015/R — Definitions

Proposed changes to Decision 2012/015/R of the Executive Director of the Agency of 24 October 2012 on acceptable means of compliance and guidance material to Commission Regulation (EU) No 965/2012 of 5 October 2012 – Acceptable Means of Compliance and Guidance Material to Annex I – Definitions.

New Guidance Material including a new definition

(103) 'safety assistant' means a passenger, accompanying an SCP, who is at least 16 years old and is physically and mentally able to:

(a) follow crew instructions;

(b) react in an appropriate manner in emergency situations; and

(c) assist in an emergency situation or evacuation of the SCP.

3.2 Draft EASA Decision proposed changes to Decision 2012/018/R — Part CAT

Proposed changes to Decision 2012/018/R of the Executive Director of the Agency of 24 October 2012 on acceptable means of compliance and guidance material to Commission Regulation (EU) No 965/2012 of 5 October 2012 – Acceptable Means of Compliance and Guidance Material to Annex IV – Part CAT

AMC1 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)
PROCEDURES

When establishing the procedures for the carriage of special categories of passengers, the operator should take into account the following factors:

(a) the aircraft type and cabin configuration;

(b) the total number of passengers carried on board;

(c) the number and subcategories of SCPs, which should not exceed the number of passengers capable of assisting them in case of an emergency ~~evacuation~~; and

(d) any other factor(s) or circumstances possibly impacting on the application of emergency procedures by the operating crew members.

AMC2 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)

BRIEFING OF SCP AND SAFETY ASSISTANT

(a) The operator should establish procedures for the pre-flight briefing of SCPs and their safety assistants, if applicable, regarding their respective safety responsibilities in normal and emergency situations.

(b) These procedures should specify the timing and the method when the briefing can be provided to the SCP and the safety assistant.

AMC3 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)

SCP TRAVELLING WITH A SAFETY ASSISTANT

An SCP should only be required to travel with a safety assistant, when it is evident that the SCP is not self-reliant and carriage could pose a safety risk to himself or herself or other passengers. Typically this will be the case when the SCP is unable to:

(a) unfasten their seat belt, or

(b) leave their seat and reach an emergency exit unaided, or

(c) retrieve and fit a life jacket, or

(d) fit an oxygen mask without assistance, or

(e) follow the safety briefing and instructions given by the crew in an emergency situation.

AMC4 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)

CONDITIONS OF SAFE CARRIAGE FOR UNACCOMPANIED CHILDREN

(a) When carrying an unaccompanied child that is not self-reliant, the operator should assess the safety risks of those unaccompanied children to ensure that they are assisted in case of emergency situations.

(b) Children up to the age of twelve years old, separated from the accompanying adult(s), who are travelling in another cabin class, should be regarded as unaccompanied children, to ensure that they are assisted in case of emergency situations.

GM1 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)

SCP BRIEFING PROCEDURE

When establishing procedures for briefing of SCPs, the following should be considered:

SCP group	Briefing content
Unaccompanied children of less than 12 years of age	When children and their accompanying adult(s) are travelling in a different class of cabin, a special briefing should be given to the children and adult(s), that in the event of an emergency they follow instructions of the cabin crew and not try to reunite inside the cabin as this would slow down the overall evacuation. Briefing passenger(s) sitting next to unaccompanied child to assist with: (a) providing the child with an oxygen mask in case of decompression after fitting one's own mask; (b) securing/releasing the child's seat belt, if necessary; and (c) calling a cabin crew member in all other in-flight situations. Briefing unaccompanied child on the following: (a) which adult will assist, if the situation requires it, with the operation of the seat belt and the fitting of the oxygen mask; (b) content of the passenger safety briefing card; and (c) in case of evacuation, seek assistance of adult passenger(s) in contacting a crew member.
Parents travelling with infants	Briefing on brace position for adult with lap-held infant. Briefing on how to evacuate carrying an infant: (a) On land, jump on the slide; and (b) in case of water landing, how to fit and when to inflate infant flotation aid (e.g. life vest, flotation cot).
Extremely obese passenger	Briefing on the nearest most suitable exit, if the passenger's physical size would possibly prevent passing through some emergency exits.
Stretcher occupant	Briefing of safety assistant of stretcher occupant: (a) In case of evacuation, : (1) disconnect medical equipment and, if necessary,

	leave equipment behind; (2) evacuate stretcher occupant when the cabin area surrounding the stretcher is clear. This may be before the evacuation of other areas of the cabin has been completed; (3) it is advisable to leave stretcher or litter in the aircraft; (4) be seated when sliding, holding stretcher occupant in front; and (5) in the event of a ditching evacuation, fit the life jacket on the stretcher occupant. (b) In case of decompression, if stretcher occupant is using medical oxygen, the stretcher occupant may continue with medical oxygen.
Visually impaired passenger	Brief visually impaired passenger and safety assistant, if applicable, on the following: (a) seat and seat-belt operation; (b) location of nearest exits (e.g. number of seat rows to nearest exit and offer to walk SCP to exit); (c) oxygen mask deployment; (d) location of life jacket; (e) brace position; (f) location of cabin crew call button; and (g) if available, take the aircraft demonstration equipment to the passenger for tactile assistance in this briefing and, if applicable, advise how to evacuate guide dog by holding the dog and sliding.
Passenger with disability of upper limbs	Brief passenger seated next to SCP: (a) to assist with the operation of their seat belt, if necessary; (b) in case of a ditching evacuation, to fit the life jacket on the SCP. (c) in case of decompression, to first put on their own oxygen mask before fitting the SCP's oxygen mask, if necessary.
Passenger with disability of lower limbs	Brief SCP and safety assistant: (a) on location of the nearest suitable exit;

	(b) that mobility aids will not be available in an emergency evacuation; (c) that cabin crew can only assist once the immediate cabin area has been evacuated.
Passenger with disability of both upper and lower limbs, e.g. quadriplegic passenger	Brief SCP and safety assistant, in case of: (a) an evacuation: (1) on the location of the nearest suitable exit; and (2) that the SCP might have to wait for cabin crew as they can only assist once the immediate cabin area has been evacuated; (b) a ditching evacuation, that the safety assistant should fit the life jacket on the SCP; and (c) a decompression, that the safety assistant is to first put on their own oxygen mask before fitting the SCP's oxygen mask.
Physically disabled passenger (aided walking)	Brief passenger to leave mobility aid behind in an emergency evacuation.

GM2 CAT.OP.MPA.1555(b) Carriage of special categories of passengers (SCPs)
MAXIMUM NUMBER OF SCPs

(a) In order to establish the maximum number of SCPs, passengers capable of assisting in case of an emergency are passengers with no other role or private responsibility that would prevent them from assisting the SCP.

(b) An adult passenger travelling alone has no other role or private responsibility, unlike for example a family travelling with small children.

GM3 CAT.OP.MPA.155(b) Carriage of special categories of passengers (SCPs)
BRIEFING PROCEDURE IN A PLANNED EMERGENCY

In a planned emergency, if time permits, passengers identified by the cabin crew as capable of assisting SCPs should be briefed on the assistance they can provide to them.

AMC1 CAT.OP.MPA.155(c) Carriage of special categories of passengers (SCPs)
SEATING OF SPECIAL CATEGORIES OF PASSENGERS

The operator should take into account the following factors when seating SCPs:

(a) If the SCP travels with a safety assistant, the safety assistant should be seated next to the SCP.

(b) If the SCP is unable to negotiate stairs within the cabin unaided and swiftly, he/she should not be seated on the upper deck of multi-deck aircraft if the exits are not certified for emergency evacuation on both land and water.

AMC2 CAT.OP.MPA.155(c) Carriage of special categories of passengers (SCPs)

SEATING ALLOCATION OF SCPs WITH A DISABILITY AND/OR RESTRAINT AID

(a) A disability and/or restraint aid that requires to be secured around the back of the seat, should not be used if there is a person seated behind, unless the seat configuration is approved for the use of such devices. This is to avoid the changed dynamic seat reactions with the disability and/or restraint aid, which may lead to head injury of the passenger seated behind.

(b) If the seat design or installation would prevent head contact of the person seated behind, then no further consideration is necessary.

GM1 CAT.OP.MPA.155(c) Carriage of special categories of passengers (SCPs)

GROUP SEATING OF SPECIAL CATEGORIES OF PASSENGERS

(a) Group seating of non-ambulatory SCPs and extremely obese passengers should be avoided. They should be seated throughout the cabin to ensure that each SCP is surrounded by the maximum number of passengers capable of assisting in case of an emergency.

(b) If non-ambulatory SCPs cannot be evenly distributed throughout the aircraft cabin, the operator should establish procedures to mitigate the increased safety risk, such as seating of passengers capable of assisting in case of an emergency, additional briefings, or training of cabin crew.

GM2 CAT.OP.MPA.155(c) Carriage of special categories of passengers (SCPs)

SEATING ALLOCATION OF SPECIAL CATEGORIES OF PASSENGERS

Seats should be allocated taking into account the following:

SCP category	Seating allocation procedures
Unaccompanied child	Unaccompanied children should be allocated seats during all phases of the flight so that visual and audible communication can be established with the cabin crew. When groups of unaccompanied children are carried, where possible, they should be seated in mix of ages, with the tallest child seated to allow assistance with fitting drop-down oxygen mask to smaller children in case of a decompression. Where possible, one adult should occupy the seat across the aisle from each row of unaccompanied children.
Passengers travelling with children up to 12 years old	If children travel with an accompanying adult in the same class of cabin, they should be seated in the same seat row as the accompanying adult. Where this is not possible, they should be seated no more than one seat row or aisle away.
Extremely obese passengers	If the passenger's physical size might prevent him or her from moving through some exits, the passenger should be seated in the vicinity of a suitable exit, taking into account the size of the exit.
Passenger with physical disability of the upper limbs	Passengers with a physical disability of the upper limbs who travel without a safety assistant should be allocated seats during all phases of the flight so that visual and audible communication can be established with the cabin crew.
Passenger with disability of lower limbs	Passenger with disability of lower limbs should be seated in a location providing easy access to floor level exits.
Passenger with disability of both upper and lower limbs (quadriplegic)	Passenger with a disability of both upper and lower limbs should be seated in a location providing easy access to floor level exits.
Mentally impaired passenger	Mentally impaired passengers, who travel without a safety assistant, should be allocated seats during all phases of the flight so that visual and audible communication can be established with the cabin crew.

Visually impaired passenger travelling with recognised assistance dogs in the cabin	Suitable arrangements should be made between the passenger and operator in advance of a flight where a guide dog or recognised assistance dog is to be accommodated. A suitable restraint harness should be provided by the owner to secure and restrain the dog during taxi, take-off, landing, and turbulence. In cruise, it is acceptable for the dog to be subject to less restraint.
Stretcher occupant	The stretcher should be installed behind a cabin monument that is capable of restraining the stretcher from moving throughout the cabin should it break loose. Alternatively, the stretcher should be installed where it can demonstrate compliance with CS.25.562(b), (c)(7), (8). Stretcher installation should be as close to the floor level non-overwing exits as practical. Preferably close to a required cabin crew station with an adjacent seat for one designated safety assistant.

3.3 Draft EASA Decision proposed changes to Decision 2012/017/R — PART ORO

Proposed changes to Decision 2012/017/R the Executive Director of the Agency of 24 October 2012 on acceptable means of compliance and guidance material to Commission Regulation (EU) No 965/2012 of 5 October 2012 – Acceptable means of compliance and Guidance material to Annex III – Part ORO

AMC1 ORO.CC.140 Recurrent training
TRAINING PROGRAMMES

(a) Elements of the annual recurrent training programme

(1) Training on the location and handling of safety and emergency equipment should include all relevant oxygen systems, and any equipment such as defibrillators if carried on board.

(2) Training on emergency procedures should cover pilot incapacitation procedures and crowd control techniques.

(3) CRM training should satisfy the following:

(i) the applicable training elements specified in Table 1 of AMC1 ORO.CC.115(e) should be covered within a 3 year cycle to the level required by Column 'Annual Recurrent Training';

(ii) the definition and implementation of the programme should be managed by a cabin crew CRM instructor; and

(iii) when CRM training is provided by stand-alone modules, it should be conducted by at least one cabin crew CRM instructor.

(b) Additional triennial elements of recurrent training programme

(1) Training on the operation of normal and emergency doors/exits should cover failure of power assist systems where fitted. This should include the actions and forces required to operate and deploy evacuation slides, and additional training when relevant for cabin crew members responsible for a pair of doors/exits.

(2) Training in the use of all fire-fighting equipment, including protective clothing, representative of that carried in the aircraft should include individual practice by each cabin crew member to extinguish a fire characteristic of an aircraft interior fire except that, in the case of halon extinguishers, an alternative extinguishing agent may be used. Training should place particular emphasis on identifying the actual source of fire or smoke.

(3) Training on normal and emergency procedures for special categories of passengers (SCPs) should cover the specific procedures established by the operator for the safe carriage of SCPs.

(4) Training on SCPs procedures should be completed within a three-year cycle. The operator may determine that such training is to be completed at shorter intervals, taking into account the route structure, passenger profiles, aircraft types operated, and seasonal demands and operations.

4 Regulatory Impact Assessment (RIA)

4.1 Issues to be addressed

4.1.1 General

This proposal addresses the need to ensure safe carriage of all passengers including SCPs. CAT.OP.MPA.155 of the Air OPS Regulation requires that SCPs shall be carried under conditions that ensure the safety of the aircraft and its occupants according to procedures established by the operator.

Evacuations on land and water have been identified as the emergency situations with the highest risks to both the individual SCP and all other passengers (see table below).

Currently the Air OPS Regulation and the associated AMC and GM do not contain guidance on briefing of specific SCPs and seating allocation of SCPs. In addition, existing AMC on cabin crew training do not include elements on the safe carriage and evacuation of SCPs.

Along with briefing and seating of passengers and cabin crew training, this NPA also proposes a safety assistant in those limited cases where a safety assistant is needed to ensure safe carriage of the SCP in case of an emergency situation. It should be noted that the issue of SCPs travelling with a safety assistant has been discussed widely with disability rights groups, with different conclusions. While many persons with disabilities complain about the different safety requirements when flying with various operators, there is currently no agreement between disability right groups, operators and safety regulators to establish clear safety requirements at European level.

This proposal proposes a European-wide AMC for SCPs travelling with a safety assistant in limited cases. The Agency's proposal for a safety assistant is fully aligned with the UK CAA's Code of Practice[26].

The Agency believes that this proposal addresses the risks identified by the TÜV Rheinland study[27] and the concerns of European disability groups and the European Commission[28], who have received complaints about inconsistent requirements and different policies across Europe, creating a barrier to air travel.

Furthermore, an extensive study financed by the European Commission on the implementation of Regulation (EC) No 261/2004 on the implementation and enforcement of the Regulation on air passenger rights stated that: '*the Commission should work with EASA to determine safe policies on carriage of PRMs, in particular to address the wide and*

[26] UK Department for Transport, Access to Air Travel for Disabled Persons and Persons with Reduced Mobility, Code of Practice, July 2008, p. 23.

[27] TÜV Rheinland study on Carriage by Air of Special Categories of Passengers. EASA Contract Number EASA.2008.C.25. 1 December 2009.

[28] See European Commission press release IP/12/602, which states that one of the persistent problems of implementation of Regulation (EC) No 1107/2006 are 'unjustified refusals <and> passengers report<ing> recurring problems with refusals and inconsistent requirements for <..> passengers to be accompanied'

unjustifiable variation in airline policies on carriage of PRMs (in particular on numerical limits and circumstances under which PRMs are required to be accompanied)'[29].

4.1.2 Who is affected?

The following stakeholders are affected by this proposal:

- **Commercial Air Transport operators**, who must ensure safe carriage of all passengers on board and who provide information to SCPs, e.g. on their website.
  - CAT operators of aeroplanes and helicopters, although helicopter operations are mostly conducted in aircraft with smaller cabin and without cabin crew. Therefore, many of the NPA amendments will not apply to helicopter operators.
  - Non-commercial operators and operators with non-motor-powered aircraft, e.g. sailplanes and balloons are excluded from the scope of this NPA.
- **Passengers defined as SCPs** in CAT.OP.MPA.155, including infants, unaccompanied children, persons with reduced mobility and disabled passengers. This proposal does not include specific proposals for deportees and inadmissible passengers or prisoners in custody, who are also considered SCPs.
- **All passengers** travelling on board an aircraft with SCPs, who are affected in case of emergencies, especially in the case of evacuation.
- **Safety assistants** of SCPs. The proposal includes a definition of a safety assistant, as well as guidance on briefing and seating of safety assistants.
- **Cabin crew**, who receive training on SCP procedures and apply SCP procedures on board.

4.1.3 How could the issue/problem evolve?

With the changing passenger mix due to demographic changes, the increased accessibility of air transport, and the increase in overall passenger numbers, the number of SCPs travelling by air is expected to increase over the coming years. Passenger rights issues in transnational transport modes will continue to evolve further and will be promoted by the European Commission and Member States. In the past, passenger rights regulations (see Regulation (EC) No 261/2004 and Regulation (EC) No 1107/2006) have made reference to European or national safety requirements for air transport. The Europeanisation of air passenger rights rules, which lies within the competency of the European Commission, has an impact on technical rules for air operations (Air OPS rules).

In addition, European rules for operators of commercial air transport have already been amended to include non-commercial operations[30].

---

[29] 'Evaluation of Regulation 261/2004' by Steer Davies Gleave on the application and enforcement of the Regulation on air passengers' rights in the EU Member States, June 2010, p. 5.

[30] See Commission Regulation (EU) No 800/2013 amending Commission Regulation (EU) No 965/2012 to include particular aspects related to non-commercial operations.

4.1.4 Safety risk assessment

4.1.4.1 TÜV Rheinland study's risk assessment

The TÜV Rheinland study's risk assessment identified a significant number of high risk scenarios for SCPs within the phases crash and evacuation. The study generated a risk ranking of different SCP subcategories, which revealed that SCPs bear an exceptional high risk to themselves or induce an exceptional high risk to other passengers. Passengers on stretchers, children, infants, extremely overweight passengers and non-ambulatory passengers bear the highest risk to themselves. The highest risk to others is induced by non-ambulatory passengers, extremely overweight passengers, passengers on stretchers and passengers with very low mobility.

'The risk to SCPs themselves mainly increases due to insufficient restraint during a crash and the inability to evacuate themselves in an appropriate manner and time. SCPs inducing a high risk to others frequently need assistance and delay the evacuation by temporarily blocking the aisles and the exits. As a result, the risk for the assistants and other occupants affected by these SCPs increases due to longer smoke exposure during evacuation (hazard of asphyxia)[31].'

Also, crew members are affected since their capabilities to successfully manage any emergency can be negatively affected due to the carriage of SCPs, safety risks to SCPs, passengers and cabin crews.

The following table taken from the TÜV Rheinland study provides an one-page overview of the risks due to carriage of SCPs. See section 4.3 for a detailed assessment of the safety risks for each policy option.

The TÜV Rheinland study developed an one-page overview of the risks due to carriage of SCPs. The following tables distinguish between risks to SCPs themselves and risks to others. They highlight the fact that the risks to the individual SCP him/herself are higher than those to other passengers. The highest risks both for the individual SCP and other passengers exist during a crash and/or evacuation.

[31] See TÜV Rheinland study, page 4.

Chart 1: Risk[32] to SCPs Themselves per Flight Phase (TÜV Rheinland study, page 122)

Passenger Category	Boarding	Aborted Take-Off	Take-Off/ climbing	In-Flight (cruising altitude)	(Rapid) Decompressio	Turbulences	Landing/ descent	Crash	Evacuation	Ditching[33]	Disembarking
infants (up to 2 y)											
children (up to 7y)											
children (up to 12y)											
expectant mothers											
on stretchers											
small adults											
Tall											
extremely overweight											
PD (upper limbs)											
PD (low mobility)											
PD (aided walking)											
PD (paralysed lower limbs)											
Deaf											
Mute											
Blind											
mentally impaired											

[32] colour code: from green to red: green: no risk / lowest risk in chart – red: highest risk in chart

[33] The risk occurring in phase ditching only represents the additional risk to an evacuation.

Chart 2: Risk[34] to Others per Flight Phase (TÜV Rheinland study page 123)

Passenger category	Boarding	Aborted Take-Off	Take-Off/ climbing	In-Flight (cruising altitude)	(Rapid) Decompression	Turbulences	Landing/ descent	Crash	Evacuation	Ditching[35]	Disembarking
infants (up to 2y)											
Children (up to 7y)											
children (up to 12y)											
Expectant mothers											
on stretchers											
small adults											
Tall											
extremely overweight											
PD (upper limbs)											
PD (low mobility)											
PD (aided walking)											
PD (paralysed lower limbs)											
Deaf											
Mute											
Blind											
mentally impaired											

[34] colour code: From green to red: green: no risk / lowest risk in chart – red: highest risk in chart

[35] The risk occurring in phase ditching only represents the additional risk to an evacuation.

4.1.4.2 Passenger Briefing Safety Hazard Description

Inadequate briefing of SCPs, their safety assistants, or persons sitting nearby can increase risks to the individual SCP and to all other passengers during an emergency situation.

The rulemaking group considered the safety hazards and mitigating measures regarding passenger briefing as very important. This importance is supported by numerous studies, including the TÜV Rheinland study commissioned by the Agency. One of the original considerations of the rulemaking group, as a result of the TÜV Rheinland study recommendations was to include a requirement of a mandatory briefing by the cabin crew of passengers at self-help exits on the operation of the adjacent exit, including an age limit for passengers sitting at those self-help exits. While the rulemaking group continues to believe that this consideration is very important, it was not pursued in the context of this rulemaking task because during the work of the rulemaking group, the Agency decided on a separate Agency rulemaking task (RMT.0575) on passenger seating and briefing, which will address those considerations[36] on passenger briefing requirements for passengers sitting at emergency exits.

4.1.4.3 Crew Training Safety Hazard Description

Studies have proven that the skills of the cabin crew have a significant effect on the speed of a successful evacuation, effectively increasing the survivability rate. Factors such as passenger and crew interaction, passenger briefing, as well as concise and specific commands have proven to be of crucial importance towards increasing the survival chances of passengers[37].

The safety risks identified by the rulemaking group relate to the need for improved training for dealing with SCPs during an evacuation. Today, this training is not standardised and may lead to delays in evacuation times with considerable safety concerns for the individual SCP as well as for all passengers. The rulemaking group considered the safety hazards and mitigating measures regarding training of cabin crew as a very important issue.

4.1.4.4 Seating Allocation Safety Hazard Description

The rulemaking group considered safety hazards and mitigating measures regarding seat allocation as a very important issue. The risks stemming from inadequate seat allocation can be grouped as follows:

- Inappropriate seating of SCPs negatively impacts the evacuation speed and survivability rate of all passengers and crew, including the SCPs themselves.
- Failure of stretcher installations could injure other passengers or block egress paths.

[36] See EASA rulemaking programme 2013-2016 under http://easa.europa.eu/rulemaking/annual-programme-and-planning.php

[37] See assessment on importance of crew training in the TÜV Rheinland study, page 133.

The group found these hazards to be of a high importance.

With regard to child restraint devices, e.g. car seats, the rulemaking group agreed to await the ICAO deliberations on child restraint devices since ICAO has responded positively to the request by the Agency to develop a global policy on child restraint devices.

4.1.4.5 Safety Assistant Safety Hazard Description

Regulation (EC) No 1107/2006 prohibits an operator from refusing carriage to a PRM, i.e. an SCP. However, an operator may derogate from this provision in order to meet applicable international, EU or national safety requirements or if the size of the aircraft or its door makes embarkation or carriage physically impossible.

This interpretation has been reconfirmed by the European Commission's interpretative guidelines on the application of Regulation (EC) No 1107/2006[38], which states that 'air carriers can require PRMs to travel with a safety assistant only for safety reasons'. Those guidelines are not binding but aim to clarify unclear provisions of the Regulation.

Article 4.2 of Regulation (EC) No 1107/2006 refers to the scenario whereby an operator requires that 'a disabled person or person with reduced mobility be accompanied by another person who is capable of providing assistance required by that person'. However, the Regulation does not specify those limited safety requirements where the operator could require a safety assistant, but instead refers to applicable safety requirements established by international, Union, or national law, or by the competent authority. The Commission's guidelines state that 'an air carrier may require disabled persons and persons with reduced mobility to be accompanied by another person who is capable of providing the assistance they need, in order to meet applicable safety requirements'.

The rulemaking group fully concurred with the Commission's guidelines and concluded that there is a need to define those safety requirements in a clear and precise manner. Today's European legal framework does not specify these safety requirements. Annex II to Regulation (EC) No 1107/2006 states that the safety assistant or accompanying person should be seated next to the disabled person or PRM. Where national rules exist today, the TÜV Rheinland study[39] has found those limits and restrictions on the number of SCPs could not be validated because they are 'not based on scientific evidence', nor do they provide 'further explanations or studies'.

The rulemaking group decided to use the term 'safety assistant' instead of the term 'accompanying person'. The term 'safety assistant' cannot be confused with a 'carer' who might assist the SCP for medical or comfort reasons, during the flight. The European Commission in its recently published guidelines on Regulation (EC)

[38] European Commission, STAFF WORKING DOCUMENT, Interpretative Guidelines, on the application of Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air, 11 June 2012, p. 8

[39] TÜV Rheinland study, page 10

No 1107/2006[40] outlines that an assistant can only be required for safety reasons. A safety assistant can, of course, also be a 'carer', but in accordance with Regulation (EC) No 1107/2006 and the latest Commission guidelines, such an assistant cannot be required by the operator for 'comfort' reasons only. This RIA does not assess any personal assistance requirements that the individual SCP might have during the course of a normal flight, e.g. assistance in using medication, going to the lavatory, etc. These personal comfort requirements are not safety related and are, therefore, outside the scope of the Terms of Reference of this rulemaking task.

The safety risks identified by the group can be summarised as follows:

— Operators are required to ensure safety of all passengers and crew during flight[41] and should require safety assistants in limited circumstances, where the passenger is not self-reliant and this could have a negative impact on the safety of the SCPs and all other passengers in case of an emergency.

— Any safety requirements, when a safety assistant is required, should be clear and precise with concrete examples to avoid confusion and misunderstandings and undue burden on SCPs.

— In addition, a European standard definition of a safety assistant for the assistance of SCPs in case of an emergency should be introduced, including the safety assistant's key characteristics.

The rulemaking group considered the safety hazards and mitigating measures regarding the safety assistant to be of high importance and the group agreed to establish a list of examples when a safety assistant would be required. This list is taken from the UK's Code of Practice[42], which has also been used as an example in the recent interpretative guidelines from the European Commission. In some limited circumstances, SCPs might not be able to evacuate themselves and/or follow crew instructions and, therefore, require a safety assistant. Therefore, in accordance with the UK's Code of Practice, a

[40] 'There is a distinction between requirements imposed for safety reasons (for example, the ability to evacuate the aircraft or to use on-board safety equipment, such as a safety belt, emergency oxygen mask or life jacket) and those that relate to the comfort of disabled persons and persons with reduced mobility on board an aircraft (for example eating). Comfort is not in itself sufficient grounds to deny carriage or require disabled persons and persons with reduced mobility to be accompanied', see European Commission, STAFF WORKING DOCUMENT, Interpretative Guidelines, on the application of Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air, 11 June 2012, p. 8.

[41] See point 1c of Annex IV to the Basic Regulation, 'the pilot in command must be responsible for the operation and safety of the aircraft and for the safety of all crew members, passengers and cargo on board'.

[42] 'Air carriers should only require a personal assistant to accompany a disabled person when it is evident that the person is not self-reliant and this could pose a risk to safety. In practice, this means anyone who is unable to unfasten their seat belt, leave their seat and reach an emergency exit unaided, retrieve and fit a life jacket, don an oxygen mask without assistance, or is unable to understand the safety briefing and any advice and instructions given by the crew in an emergency situation (including information communicated in accessible formats). In some cases, more than one assistant may be necessary, for example, where lifting is required' see UK Department for Transport, Access to Air Travel for Disabled Persons and Persons with Reduced Mobility, Code of Practice, July 2008, p. 23.

safety assistant should only be required when it is evident that the person is not self-reliant and this could pose a safety risk for themselves or others.

4.1.4.6 Changes to Certification Requirements Safety Hazard Description

Risk scenarios associated with evacuation of passenger aircraft carrying SCPs are significantly higher than risk during other phases of flight. During an evacuation, SCPs, who cannot evacuate on their own, are likely to delay the evacuation or to temporarily block the aisles and exits, impacting the survivability of crew and other passengers. Delays in evacuation can have serious consequences, such as an increased risk of asphyxia due to longer smoke exposure. Means to ensure a fast evacuation of the cabin whenever SCPs are on board is, therefore, crucial and the rulemaking group considered all mitigating measures that will improve evacuation of aircraft whenever SCPs are on board as highly important.

Studies have shown that around 90 % of accidents are survivable. Half of fatalities are caused by fire or due to the effects of smoke[43]. However, new material used inside the aircraft cabin has improved survivability due to more fire-resistant interior cabin material with improved flammability features. Therefore, the risk of fire and smoke has decreased as a result of improved certification requirements, requiring new fire-resistant materials.

For large aeroplanes, evacuation capabilities are currently prescribed in paragraph (h) of Appendix J to CS 25.803. These evacuation certification specifications prescribe the conditions under which aeroplanes having a seating capacity of more than 44 passengers have to be evacuated in less than 90 seconds in an actual demonstration[44]. Appendix J describes the emergency demonstration and the test criteria in more detail and prescribes that the actual demonstration has to take place with half of the emergency exits inoperable and should take account of gender and age mixes and include infants by use of dolls, but does not include passengers with disabilities. Paragraph (h) of Appendix J to CS-25 'Emergency Demonstration' defines what is the representative mix/load of persons 'in normal health' to be used in such demonstrations.

The TÜV Rheinland study recommended investigating the effects of increasing the cabin crew to passenger ratio and its potential to compensate for possible evacuation delays by SCPs. The rulemaking group assessed this recommendation by looking at the impacts as a result of a change to certification requirements of minimum number of crew whenever SCPs are carried. The rulemaking group discussed the possible

[43] See: ETSC Increasing the Survival Rate in Aircraft Accidents - Impact Protection, Fire Survivability and Evacuation, 1996

[44] CS-25.803(h) For aeroplanes having a seating capacity of more than 44 passengers, it must be shown that the maximum seating capacity, including the number of crew members required by the operating rules for which certification is requested, can be evacuated from the aeroplane to the ground under simulated emergency conditions within 90 seconds. Compliance with this requirement must be shown by actual demonstration using the test criteria outlined in Appendix J of this CS–25 unless the Agency finds that a combination of analysis and testing will provide data equivalent to that which would be obtained by actual demonstration.

consequences of reviewing the certification and operational rules relating to certification requirements, such as certification tests and certification rules on the minimum number of cabin crew, whenever SCPs are carried on board. The rulemaking group considered the safety hazard mitigation measures already contained in the proposed changes to the Air OPS rules (AMC and GM) to be more effective than changes to certification rules.

4.2 Objectives

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Chapter 2 of this NPA. The specific objective of this proposal is to improve the level of safety for SCPs, all other passengers, as well as operating crew members whenever SCPs are carried on board.

4.3 Policy options

For each area, the option of 'doing nothing' (Option 0) has been considered as the reference scenario. Non-rulemaking options were considered wherever possible, i.e. by relying on the operator's safety management and existing OPS rules. The TÜV Rheinland study included more than 45 possible technical recommendations/options that were streamlined into a manageable number of five policy areas (passenger briefing, cabin crew training, seating allocation, SCPs travelling with a safety assistant, and changes to certification requirements).

The rulemaking group screened several options for each policy area and reduced the number of options to a practical level.

The remaining policy areas where individually assessed and the rulemaking group discussed those options with the highest significance in terms of safety improvement and the smallest impact on the SCPs' access to air transport or economic impact. The aim of the rulemaking group was to ensure a high level of safety for all passengers, while minimising the impact on the individual SCP or group of SCPs travelling together.

4.4 General aspects of the options and introduction of the impact analysis

This RIA only applies to commercial air transport (CAT) operations. The changes proposed affect European operators and European and non-European passengers, flying with European operators.

The following sections provide a detailed analysis of the possible impacts resulting from the considered options, once the applied methodology to assess the impacts has been explained. The detailed analysis of impacts evaluates the impact on passengers, operators, and aircraft manufacturers. The proposed changes should include a transitional period of 1,5 years for all of the proposed AMC and GM with the exception of the amended AMC1 ORO.CC.140 on training of cabin crew, which should include a transition period of 4 years to ensure that operators have sufficient time to amend their training manuals and procedures.

4.5 Methodology and data

4.5.1 Applied methodology

4.5.1.1 Choice of an assessment methodology

Once the issues have been analysed, the objectives can be defined and options can be proposed to achieve these objectives and solve the issues. The analysis of the impacts of these options can be performed with different methodologies depending on the availability and types of data. In addition, one of the main principles of impact assessment is to provide a proportionate effort for the depth of the analysis in relation to the scale of the issue.

Since many options related to improving or restricting access to air transport for SCPs, i.e. disabled passengers and persons with reduced mobility, no full monetisation was always possible.

Considering the limited availability of data, which, in addition, is a mixture of qualitative and quantitative types, it was decided to use the multi-criteria analysis (MCA) to assess the options proposed to solve the issues.

4.5.1.2 Multi-criteria analysis principles

The following section explains the principles of the MCA and how it was applied in a proportionate way to the issues.Multi-Criteria Analysis (MCA) covers a wide range of techniques that aim at combining a range of positive and negative impacts into a single framework to allow easier comparison of scenarios. Essentially, it applies cost-benefit thinking to cases where there is a need to present impacts that are a mixture of qualitative, quantitative, and monetary data, and where there are varying degrees of certainty. The MCA key steps generally include:

(a) establish the criteria to be used to compare the options (these criteria must be measurable, at least in qualitative terms);

(b) attribute weights to each criterion to reflect its relative importance in the decision;

(c) score how well each option meets the criteria; the scoring needs to be relative to the baseline scenario;

(d) rank the options by combining their respective weights and scores; and

(e) perform sensitivity analysis on the scoring to test the robustness of the ranking.

The criteria used to compare the options were derived from the Basic Regulation and the guidelines for the RIA developed by the European Commission. The principal objective of the Agency is to 'establish and maintain a high uniform level of safety' (Article 2(1) of the Basic Regulation). As additional objectives, the Basic Regulation identifies environmental, economic, proportionality, and harmonisation aspects, which are reflected below.

The following table shows the weights that were attributed to the individual groups of criteria. Based on the above considerations, and on the Agency's mandate, 'safety' received the highest weight, i.e. 3.

Table 1 — Assessment criteria for the Multi-Criteria Analysis (MCA)

Overall objectives	Specific objectives and assessment criteria	
	Weight	**Description**
Safety	3	Maintain or improve the level of safety.
Economic	1	Ensure cost-effectiveness. Ensure 'level playing field'.
Environmental	2	Avoid negative effects on the environment (was not assessed in this NPA).
Social	1	For the individual passenger, promote comfort and well-being during the flight. For the individual cabin crew, avoid negative effects on employment in air operations.
Proportionality	1	(SMEs), General Aviation, Business Aviation. (was not assessed in this NPA) Ensure proportionate rules for Small and Medium-sized Enterprises.
Regulatory harmonisation	2	Ensure full consistency with EU laws and regulations. Ensure compliance with ICAO Standards (if appropriate). Achieve the maximum appropriate degree of harmonisation within Europe and with third countries.

Environmental impacts are usually attributed a weight of 2 as the Agency has certain specific responsibilities in this area related to noise and emissions. For the same reason, impacts on other assessment areas are attributed a weight of 1 since these areas are to be duly considered when developing the Implementing Rules. Each option developed below will be assessed based on the above criteria. Scores are used to show the degree to which each of the options achieves the assessment criteria. The scoring is performed on a scale between –5 and +5. Table 2 below gives an overview of the scores and their interpretation.

Table 2: Scores for the MCA

Score	Descriptions	Example for scoring options
	Highly positive impact	Highly positive safety, social, economic impact or highly positive impact on regulatory coordination. Savings of more than 5 % of annual turnover for any single firm; total annual savings of more than EUR 100 million.
	Medium positive impact	Medium positive social, safety or economic impact or medium positive impact on regulatory coordination. Savings of 1–5 % of annual turnover for any single firm; total annual savings of EUR 10–100 million.
	Low positive impact	Low positive safety, social or economic impact and low positive impact on regulatory coordination. Savings of less than 1 % of annual turnover for any single firm; total annual savings of less than EUR 10 million.
	No impact	
	Low negative impact	Low negative safety, social or economic impact and low negative impact on regulatory coordination. Costs of less than 1 % of annual turnover for any single firm; total annual costs of less than EUR 10 million.
	Medium negative impact	Medium negative safety, social or economic impact or medium negative impact on regulatory coordination Costs of 1–5 % of annual turnover for any single firm; total annual costs of EUR 10–100 million.
	Highly negative impact	Highly negative safety, social or economic impact or highly negative impact on regulatory coordination. Costs of more than 5 % of annual turnover for any single firm; total annual costs of more than EUR 100 million.

Consideration for social impacts

This RIA assesses the social impact in two ways. Firstly, whether the option will positively or negatively affect health and safety of the operator's employees when dealing with SCPs. Secondly, whether the measure has a positive or negative impact on access to air travel for SCPs and the impact on equal treatment aspects of the individual SCP as prescribed by non-discrimination legislation (Art. 13 of the EC Treaty and Regulation (EC) No 1107/2006). The social impact assessment does not take into account whether the option affects the safety of the individual SCP, since this is done

separately in the dedicated section on safety, which focusses on the safety of all passengers, including SCPs, and crew travelling by air[45].

4.5.2 Data collection

The rulemaking group was in the favourable position of working on the basis of the TÜV Rheinland Study, which to date is considered the most comprehensive study on carriage of SCPs.

This study includes a large number of test results and examples, and provides recommendations. In addition, the Agency could draw on the expertise and advice from its rulemaking group members representing experts from aircraft manufacturers, aviation authorities, cabin crew training specialists, and trade union representatives.

4.6 Passenger Briefing

4.6.1 SCPs briefing options identified

Possible Risk Mitigation Measures **SCPs Briefing procedures**	
	Option 0: Do nothing. No further briefing required. Rely on operator safety management and best practices. OPS.1.285 and CAT.OP.MPA.170[46] already require a safety briefing card and mandatory verbal briefing about safety matters. Parts or all of the briefing may already be provided by an audio-visual presentation.
	Option 1: Amend AMC/GM to Part CAT to establish procedures for the pre-flight briefing of SCPs and their safety assistants regarding their respective safety responsibilities in normal and emergency situations. Additional Guidance Material (GM) on briefing content for specific SCPs. Operator to choose the best communication channel to achieve briefing.
Develop procedure for planned emergency evacuation	
	Option 0 : Do nothing. Rely on operator safety management and best practices.
	Option 1 : Amend AMC/GM to Part CAT for planned emergency situations to ensure that in a pre-planned emergency, if time permits, passengers are identified by the cabin crew as capable of assisting SCPs and to ensure that in a planned emergency situation they are briefed on the assistance they can provide to them.

[45] For more information on social impact assessments. See http://ec.europa.eu/social/main.jsp?catId=760&langId=en

[46] See therein CAT.OP.MPA.170 'Passenger briefing' in Commission Regulation (EU) No 965/2012.

4.6.2 Safety impact

4.6.2.1 SCP briefing procedures

Option 0, 'do nothing' (score -1), foresees no additional requirements and relies on the operator's safety management and best practices. This option has a low negative safety impact, because without improved briefing procedures the current situation would deteriorate, since the number of SCPs is expected to increase over time.

Option 1 (score +3) has a medium positive safety impact and proposes pre-flight briefings for some SCPs categories and/or their safety assistants. This briefing should be delivered pre-flight, whenever possible, with the operator determining the best method and time to brief the individual passenger. The following SCPs subcategories will benefit from additional briefing: unaccompanied children, parents travelling with infants, extremely obese passengers[47], passengers on stretchers, visually impaired passengers, and passengers with a physical disability of the upper and/or lower limbs.

This option leaves the responsibility to the operator to define the best means to communicate with the passenger. Additional safety information on the safety briefing card for specific SCPs is not deemed to be of added value, since it is not considered the most effective means of communicating specific information to specific SCPs. In addition, feedback from disability stakeholder groups confirmed that the importance of 'Braille' to communicate information to blind people has diminished and that different 'Braille' language versions would have to be made available, making it more difficult to ensure the blind passenger is briefed in his/her 'Braille' language.

Due to the difficulty to define these cards (like the Braille example) and the cost involved, it is left to the responsibility of the operator to choose the best communication support to achieve Option 1.

The rulemaking group also discussed an additional negative safety/social impact that might apply to a passenger, with no personal connection to the SCP, who is asked to assist the SCP as a safety assistant. Those passengers expected to assist the SCP in case of an emergency situation take on themselves an additional burden and may just accept this responsibility because they feel pressured by the cabin crew, the SCP or other passengers. Those passengers are unlikely to understand the aviation safety risks involved, nor the individual capabilities of the SCP they are asked to assist. The legal question whether such a responsibility can be transferred to an unrelated passenger, who is not aware of the consequences, has not been assessed in detail in this RIA, since it is outside the scope of this rulemaking task, but has been raised by rulemaking group members.

[47] ED Decision 2012/018/R, in AMC2 CAT.OP.MPA.165 Passenger seating ACCESS TO EMERGENCY EXITS, refers to 'passengers who are so obese that they would have difficulty in moving quickly or reaching and passing through the adjacent emergency exit'.

4.6.2.2 Develop procedures for planned emergency evacuation

Option 0,'do nothing' (score -1), has a low negative safety impact and is based on the status quo. This option has a low negative safety impact, because without improved briefing procedures the current situation would deteriorate since the number of SCPs is expected to increase over time. However, due to operators' risk management and best practices, operators are already required to develop procedures to be followed by cabin crew in case of evacuation.

Option 1 (score +3) has a medium positive safety impact and establishes guidance on procedures that will positively impact evacuation. Evacuations are more frequent than commonly assumed and are not always unplanned[48]. In a pre-planned emergency evacuation, the management of an upcoming evacuation by cabin crew, e.g. by identifying passengers able to assist in the evacuation, by re-seating and by re-briefing passengers, preparation of the evacuation is crucial and effective to ensure that in case of the evacuation, passengers and crew will evacuate quickly and safely.

Safety impact summary

The importance of passenger briefing has been demonstrated by several studies[49]. The option recommends targeted briefing for some specific SCPs. This is expected to increase the survivability of the individual SCP and all passengers on board in case of an emergency situation.

Procedures that assist cabin crew in case of a pre-planned evacuation to prepare the evacuation by identifying the right passengers that are able to assist and to brief them accordingly have a clear safety benefit.

4.6.3 Social impact

4.6.3.1 SCP briefing procedures

Option 0 'do nothing' (score 0) foresees no additional requirements and relies on the operator's safety management and best practices. It is difficult to estimate the social impact on the individual passenger and cabin crew since briefing can take place outside the cabin or once the passenger has boarded the cabin.

Option (1), (score +1), has a low positive social impact, because a briefing procedure will bring a benefit for SCP by ensuring a better integration in the aircraft 'environment'.

The rulemaking group discussed whether there could be a potential negative social impact if the briefing occurs inside the aircraft and this briefing could be perceived to be

[48] During a 16-month observation, evacuations take place every 11 days. The most frequent event leading to an evacuation was an engine fire, accounting for 32 % of the 46 evacuations included in the case study. 65 % of the evacuations were reported to be unplanned evacuations with little or no preparation time. Whereas other evacuations where pre-planned evacuations allowing the crew to prepare the evacuation. See: NTSB - Emergency Evacuation of Commercial Airplanes, 2000.

[49] See two examples cited in the TÜV Rhineland study: (1) Australian Transport Safety Bureau, Evacuation Commands for Optimal Passenger Management, 2006, and (2) Office of Aerospace Medicine ,Federal Aviation Administration, Access to Egress III, January 2004

discriminatory. For some SCPs subcategories and from a social point of view, briefing inside the aircraft could have a negative score and briefing outside the aircraft would have a positive score.

The rulemaking group also discussed an additional negative safety/social impact that might apply to a passenger, with no personal connection to the SCP, who is asked to assist the SCP as a safety assistant. Those passengers expected to assist the SCP in case of an emergency situation take on themselves an additional burden and may just accept this responsibility because they feel pressured by the cabin crew, the SCP or other passengers. Those passengers are unlikely to understand the aviation safety risks involved, nor the individual capabilities of the SCP they are asked to assist. The legal question whether such a responsibility can be transferred to an uninvolved passenger, who is not aware of the consequences, has not been assessed in detail in this RIA, since it is outside the scope of this rulemaking task, but has been raised by rulemaking group members.

4.6.3.2 Develop procedures for planned emergency evacuation

Both Option 0 'do nothing' and Option 1 (score +0) on procedures for planned emergency situations do not have a social impact on the operator's crew or on passenger's well-being.

4.6.4 Economic impact

4.6.4.1 SCP briefing procedures

Option 0 'do nothing' (score +0) foresees no additional requirement and relies on the operator's safety management and best practices. This option has no economic impact.

Option 1 (score -3) has a medium negative economic impact. Depending on the passenger mix of a particular flight, this option could result in specific briefings for some specific SCPs. Because of the high workload while boarding, individual briefings are often not feasible at that time. For this reason, the operator may decide to provide briefing to passengers prior to boarding, e.g. during the booking of the flight, on the operator's website, etc. Providing the operator with more flexibility on when and how to provide briefing to specific SCPs is expected to minimise the implementation costs.

4.6.4.2 Develop procedures for planned emergency evacuation

Option 0 'do nothing' (score +0) relies on the operator's safety management and best practices and maintains the status quo. It, therefore, has no negative economic impact.

Option 1 (score -1), has a low negative economic impact. This option will require operators to establish procedures and related training on briefing of passengers capable of assisting SCPs.

4.6.5 Regulatory coordination impact

4.6.5.1 SCP briefing procedures

Option 0 'do nothing' (score +0) has no impact on regulatory coordination.

Option 1 (score +1) has a low positive impact since under the US rules § 121.571, crew members assigned to the flight are required 'to conduct an individual briefing of each

person who may need the assistance of another person to move expeditiously to an exit in the event of an emergency. In the briefing the required crew member shall brief the person and his attendant, if any, on the routes to each appropriate exit and on the most appropriate time to begin moving to an exit in the event of an emergency'.

4.6.5.2 Develop procedures for planned emergency evacuation

None of the options have an impact on regulatory coordination.

4.6.6 Impact summary of passenger briefing options

4.6.6.1 SCP briefing procedures

Objectives/ criteria	***Weights***	**Scores (unweighted)**		**Scores (weighted)**	
		Option 0	Option 1	Option 0	Option 1
Safety	*3*	-1	+3	-3	+9
Social	*1*	0	+1	0	+1
Economic	*1*	0	-3	0	-3
Regulatory coordination	*1*	0	+1	0	+1
Total		0	1	-3	**+8**

4.6.6.2 Develop procedures for planned emergency evacuation

Objectives/ criteria	***Weights***	**Scores (unweighted)**		**Scores (weighted)**	
		Option 0	Option 1	Option 0	Option 1
Safety	*3*	-1	+3	-3	+9
Social	*1*	0	0	0	0
Economic	*1*	0	-1	0	-1
Regulatory coordination	*1*	0	0	0	0
Total		0	0	-3	**+8**

4.7 Crew Training

4.7.1 Crew Training Option identified

Possible Risk Mitigation Measures **Propose a detailed European standard for cabin crew training considering SCP**	
	Option 0: Do nothing. Rely on operator safety management and best practices. Operator to develop own policy and procedures for the carriage of SCPs and the initial, conversion/differences and recurrent training needed, which will be submitted to the national competent authority.
	Option 1: Amend applicable cabin crew training programmes in AMC to Part ORO for recurrent training (a) Recurrent training on normal and emergency procedures should cover the specific procedures established by the operator for the carriage of SCPs. (b) The operator should take into account the safety risk assessment completed in accordance with ORO.GEN.200 to determine if recurrent training on these SCPs procedures should be completed annually or within a three-year cycle.

4.7.2 Safety impact

Option 0, 'do nothing' (score -1), foresees no additional requirement and relies on the operator's safety management and best practices. This option has a low negative impact on safety, because without improved briefing procedures the current situation would deteriorate, as the number of SCPs is expected to increase over time.

Option 1 (score +3), has a medium positive safety impact. This option includes an AMC to complement existing AMC on recurrent training. The additional training topics will include the procedures on carriage of SCPs. The training will increase the safety for all occupants on the aircraft in emergency situations since awareness of the conditions and guidance on what to do will be provided. Finally, training will have a positive safety impact and will reduce the risk of negatively impacting the medical fitness of cabin crew during flight. A side impact, not linked to the NPA proposal, but has a positive social impact for the cabin crew and the safety of the passengers is that cabin crew will be more aware that handling SCPs should not endanger their physical fitness during flight, i.e. by straining their back due to lifting.

4.7.3 Social impact

Option 0, 'do nothing' (score -1), has a low negative social impact on the passengers and cabin crew. Whereas some operators might already include cabin crew training on SCPs procedures, which includes training on passenger briefing and seating allocation as part of their safety management system, other operators might not have included such a training.

Option 1 (score +1) has a low positive social impact, for the following reasons:

(a) For the individual SCP, training of cabin crew has a positive social impact, because the SCP is likely to receive better attention and treatment during the flight, thus, improving access to air transport.

(b) For the individual cabin crew member, who receives SCPs training, this can have a positive impact on their health and safety in the workplace, since the cabin crew member will be aware of the SCP's needs in terms of briefing and will also be aware of the SCPs procedures, which are based on risk assessments. This means that the cabin crew member will be aware that lifting individual passengers can endanger not only their physical fitness for the duration of the flight, but also their well-being in the longer term.

4.7.4 Economic impact

Option 0 'do nothing' (score +0) foresees no additional requirement and relies on the operator's safety management and best practices. This option has no additional impact on safety.

Option 1 (score -1), has a low negative economic impact because it foresees a limited addition to existing safety related recurrent training elements related to the carriage of SCPs. The operator would be able to determine if the recurrent training on these SCPs procedures should be completed annually or within a three-year cycle. The additional training is aligned with existing AMC on cabin crew training. The available guidance on briefing related topics and seating allocation of SCPs would be available to the operator and can be tailored to the operator's needs. It is difficult to estimate the additional hours to train cabin crew on new SCPs procedures, since operators can tailor the training to their operation.

4.7.5 Regulatory coordination impact

All options (score +0) do not have an impact on regulatory coordination.

4.7.6 Impact summary of crew training options

Objectives/ criteria	***Weight***	**Scores (unweighted)**		**Scores (weighted)**	
		Option 0	Option 1	Option 0	Option 1
Safety	*3*	-1	+3	-3	+9
Social	*1*	-1	+1	-1	+1
Economic	*1*	0	-1	0	-1
Regulatory coordination	*1*	0	0	0	0
Total		-2	+3	-4	**+9**

4.8 Seating Allocation

4.8.1 Seating Allocation Options identified

Possible Risk Mitigation Measures	
Maximum number of SCPs on board	
	Option 0 : Do nothing. Rely on operator's safety management and OPS rules (Air OPS Regulation). AMC1 CAT.OP.MPA.155(b) already stipulates that when the number of SCPs forms a significant proportion of the total number of passengers carried, they must not exceed the number of passengers capable of assisting with an emergency evacuation. The operator may also apply lower limits if the other factors to be considered justify a lower limit. The other factors include aircraft type and cabin configuration, the total number of SCPs carried on board, or any circumstances impacting on the application of emergency procedures by the operating cabin crew.
	Option 1: Amend existing point (c) of AMC1 CAT.OP.MPA.155(b) to delete the word 'evacuation'. This is to ensure that all emergency situations are taken into account when establishing the operator's procedure for carriage of SCPs. Develop further guidance (GM) to AMC1 CAT.OP.MPA.155(b) (Air OPS Regulation), when establishing the maximum number of SCPs on board, which should not be greater than the number of passengers capable of assisting in case of an emergency. This guidance should explain the meaning of 'passenger capable of assisting with an emergency', by stating that such passengers are those without any other role or private responsibility that would prevent them from assisting the SCP.
	Option 2: Amend Part CAT to limit the number of SCPs who can be carried depending on the level of self-reliance of the individual SCP concerned. This option would establish a mandatory limit.
Seating allocation for specific SCPs	
	Option 0: Do nothing. Current applicable and future rules already prohibit seating of SCPs at emergency exits and where they would hinder evacuation. The operator's safety management system will identify hazards stemming from unsafe seating allocation.

	Option 1: SCPs who are self-reliant and travel in a group should wherever possible be allowed to be seated together unless there is a clear safety risk. Therefore, this option establishes additional AMC and GM to CAT.OP.MPA.155(c) when allocating seats to some SCPs: (a) In accordance with Regulation (EC) No 1107/2006, the **safety assistant**, when required, should be seated next to the SCP where it is most convenient to assist the SCP. (b) If the SCP is **unable to negotiate stairs** within the cabin unaided and swiftly, he or she should not be seated on the upper deck of multi-deck aircraft if the exits are not certified for emergency evacuation on both land and water. (c) **Group seating** of non-ambulatory SCPs, and extremely obese passengers should be avoided and they should be allocated seats and distributed throughout the cabin to ensure that each SCP is surrounded by the maximum number of passengers capable of assisting in case of an emergency. (d) Where SCPs cannot be distributed throughout the cabin, the operator should have **procedures** to deal with the increased safety risk. (e) Additional guidelines for **specific SCPs** (unaccompanied children, passengers travelling with children up to 12 years, extremely obese passengers, passengers with physical disability of the upper limbs or with a disability of both the upper and lower limbs, mentally impaired passengers travelling without a safety assistant, passengers travelling with a recognised assistance dog, stretcher occupants). (f) A **disability and/or restraint aid** that requires to be secured around the back of the seat should not be used with a person seated behind unless the seat configuration is approved for the use of such devices as the changed dynamic seat reactions with the restraint aid may lead to head injury of the passenger seated behind. If the seat design or installation would prevent head contact of the person behind, then no further consideration is necessary. (g) Additional AMC to ensure that a **child up to the age of twelve** years, separated from the accompanying adult(s), who is (are) travelling in another cabin class, should be regarded as an unaccompanied child in accordance with the applicable procedures established in the operations manual.
	Option 2: Amend Part CAT to require mandatory seating requirements depending on the level of self-reliance of the individual SCP concerned, the aircraft type used for the flight, and the number of emergency exits available. For stretchers: amend CS-25 to develop new stretcher certification requirements for new aircraft (no retrofit). New requirement for stretcher installations to comply with emergency dynamic landing loads with some exceptions.

4.8.2 Safety impact

4.8.2.1 Maximum number of SCPs on board

Option 0, 'do nothing' (score -1), has a low negative impact safety and maintains the status quo. The current situation would deteriorate, since the number of SCPs is expected to increase over time. This option has a low negative safety impact, because based on the assumption that the number of SCPs will increase, the absence of a procedure that explains the meaning of 'passenger capable of assisting with an emergency', could lead to a passenger being declared a passenger capable of assisting, despite the fact that this passenger does have another role or private responsibility. In this case, the SCP would not receive the assistance he or she might need in case of an emergency.

Option 1 (score +1) has a low positive impact on safety and provides additional guidance for the operator to establish the maximum number of SCPs. This guidance will assist the operator in applying the rules and accompanying AMC that ensure safe carriage whenever SCPs are on board. This option ensures that all emergency situations are taken into account, and not only the event of an evacuation. In addition, this option ensures that the operator will only include those passengers who do not have another role or private responsibility during the flight into the group of passengers capable of assisting an SCP in case of an emergency situation.

Option 3 (score +3) has a medium positive impact on safety. This option would introduce a fixed limit on the number of SCPs, depending on their level of self-reliance and would establish a mandatory strict limit. In theory, such a strict limit, would be safer than no strict limit, but the safety impact would be difficult to assess in reality, since such an option is unlikely to be acceptable due to its discriminatory nature. This option conflicts with Regulation (EC) No 1107/2006, which requires an airline operator to make all reasonable efforts to arrange seating to meet the needs of a PRM subject to safety requirements and availability. Theoretically, this option would increase safety, since access to air transport would be refused to a large number of passengers (PRMs, infants etc.), as soon as the relevant limits are reached.

4.8.2.2 Seating allocation for specific SCPs

Option 0,'do nothing' (score -1), has a low negative impact on safety and maintains the status quo. The current situation would deteriorate, since the number of SCPs is expected to increase over time.

Option 1 (score +1), the preferred option, establishes additional AMC and GM whenever specific groups of SCPs are carried. Regarding seating allocation, the TÜV Rheinland study found that '*the seating position of SCPs with high risk and accompanying persons for evacuation also affect the risk'* to flight safety due to air travel by SCPs[50].

Studies on the exponential increase of evacuation time when transporting several SCPs have demonstrated that SCPs in general slow the evacuation due to their interactions in

[50] See TÜV Rheinland study, page 157.

the cabin. The 'Emergency Escape of Disabled Air Travellers' study[51] shows, however, that (with suitable seat selection) it may be assumed that an increase in the number of PRMs results in a linear or digressive increase of the total evacuation time. This was examined for the 'Totally incapacitated', 'Lower Limb and Partial Immobility' and 'Upper Limb and Sensorial Handicaps' passenger groups and is applicable to overwing exits as well as floor-level exits. Appropriate seating and avoidance of group seating also makes undesirable interaction of the disabled less likely in the evacuation tests. According to the study's findings, if the SCP is not surrounded by passengers capable of assisting in an emergency evacuation, precautionary measures are then not applicable and the overall risk in that situation is higher than calculated because the risk assessment always assumes that passengers that are capable of assisting the SCP are seated next to the SCPs as a precautionary measure.

In addition, group seating of extremely obese passengers[52] puts additional strain on the stability of the seat structure. From a certification point of view, group seating of SCPs that are extremely obese should be avoided, since each individual seat place is certificated for a maximum weight of 77 kg. Seating of a group of extremely obese passengers next to each other could pose a very high risk to the stability of the overall seat structure and could cause serious injuries to the passengers in the surrounding area. This situation can be mitigated by appropriate seating and by distributing the SCPs across the aircraft, ensuring that all SCPs are surrounded by a maximum number of passengers capable of assisting in case of an emergency.

Given the cabin layout and the seats available, the recommended ideal seating might not always be possible. However, seating of SCPs where they are isolated (mostly in the aft section of the aircraft cabin) according to studies is not desirable. Studies[53] have shown that in evacuation tests next to obvious criteria, such as the severity of the disability and the number of SCPs in the cabin, the successful evacuation of SCPs largely depended on whether the SCP was seated closer to the exit and whether the crew delayed 'able-bodied passengers' and instructed them to evacuate the SCPs. The study also found that the evacuation flow was decreased as soon as the SCPs and their safety assistants entered the evacuation queue.

Finally, this option also foresees that children, who are flying in another class of cabin than their accompanying adults (parents), should be regarded as unaccompanied children. Operators reported that an increasing number of families, when booking their tickets, indicate different classes of cabin for adults and children, who are then unaccompanied in their class of cabin. From a safety point of view, such a seating in different classes of the cabin is unfavourable and will create difficult situations in the

---

[51] See TÜV Rheinland study, page 127.

[52] Decision 2012/018/R to Commission Regulation (EU) No 965/2012 (Air OPS) in AMC2 CAT.OP.MPA.165 Passenger seating ACCESS TO EMERGENCY EXITS, refers to 'passengers who are so obese that they would have difficulty in moving quickly or reaching and passing through the adjacent emergency exit'.

[53] FAA Evacuation Tests, Emergency Escape of Handicapped Air Travellers, July 1977, and TÜV Rheinland evacuation tests, see TÜV Rheinland study, page 86.

case of an emergency, e.g. an emergency evacuation, where children will try to reunite with their parents, who sit in another class of the cabin and vice-versa. This could negatively impact the evacuation flow of all passengers.

Option 2 (score +3), has a medium positive safety impact and would amend Part CAT to require mandatory seating requirements depending on the level of self-reliance of the individual SCP concerned, the aircraft type used for the flight, and the number of emergency exits available. For stretchers, this option would amend CS-25 to develop new stretcher certification requirements for new aircraft (no retrofit to comply with emergency dynamic landing loads with some exceptions).

This option conflicts with Regulation (EC) No 1107/2006, which requires an airline operator to make all reasonable efforts to arrange seating to meet the needs of a PRM subject to safety requirements and availability.

The issue of what constitutes appropriate seating and how available seats should be allocated, particularly those with additional legroom, would seem to be quite contentious. The variety in aircraft layout and the differences in seating configurations including different cabin classes, even between aircraft of the same type, means that a prescriptive statement on what might constitute appropriate seating in each possible scenario is impossible.

As a result, the positive safety impact is low because, in practical operations, it is almost impossible to comply with such prescriptive seating allocation requirements. Regarding the development of new stretcher certification requirements for new aircraft, those new requirements would have a limited applicability, which would also lead to a low impact on safety.

Combined safety impact summary

— New guidance for operators when establishing the maximum number of SCPs on a given flight by defining that the passengers, capable of assisting in case of an emergency evacuation, should not have another role during the flight.

— New AMC to ensure that SCPs who are unable to negotiate stairs do not sit on the upper deck of multi-deck aircraft if those exits are not certified for evacuation on land and water. In addition, the safety assistant, where relevant, should be seated next to the SCP.

— New guidance on group seating of non-ambulatory SCPs and of extremely obese passengers.

— Additional new seating allocation guidance for specific SCP groups.

— Additional guidance on the positioning of restraint aids that are secured around the back of a seat to prevent a safety risk to passengers sitting in the vicinity of the SCP.

4.8.3 Social impact

4.8.3.1 Maximum number of SCPs on board

Option 0 (score 0) has no social impact.

Option 1 (score -1) has a low negative social impact. This option mainly provides additional guidance for the operator to establish the maximum number of SCPs. This option defines whether a passenger can be considered as a passenger capable of assisting an SCP in case of an evacuation. Therefore, this option excludes passengers, with another role, e.g. families with underage children travelling together, because their other role will make them less capable of assisting the SCP. This guidance material will be included into the operator's procedures, describing how the operator establishes the number of passengers capable of assisting an SCP. Therefore, this option provides additional guidance to the operator on the limits already in place under AMC1 CAT.OP.MPA.155(b). It could be argued that further guidance decreases the maximum number of SCPs and, therefore, affects access of SCPs to air travel, as prescribed in Regulation (EC) No 1107/2006.

For scheduled commercial air transport (CAT operations), further guidance on how to establish if a passenger is capable of assisting an SCP is unlikely to create a further limit, preventing SCPs' access to air transport. For CAT operations with smaller aircraft and an unusual passenger-mix, e.g. a scheduled flight with a smaller aircraft and a large group of SCPs and infants travelling with their parents/guardians, a clearer definition of passengers capable of assisting SCPs might limit the maximum number of SCPs and could in the worst case lead to denied boarding of SCP travellers.

Option 2 (score -5) has a high negative social impact. This option establishes different limits for different SCP subcategories depending on the level of self-reliance of the individual SCP concerned, the aircraft type used for the flight, and the number of emergency exits available. Aside from the fact that this option would be difficult to implement, it would also limit access to air travel in a much more profound way than Option 1, because strict limits would apply depending on the disability of the SCP. This option would lead to more SCPs, who would be denied boarding, because stricter non-negotiable limits would apply. As described above, this option conflicts with Regulation (EC) No 1107/2006.

4.8.3.2 Seating allocation for specific SCPs

Option 0 'do nothing' (score 0) has no social impact.

Option 1 (score -1) has a low negative social impact since seating allocation guidelines might prevent SCPs from sitting at a preferred location. This option could prevent severely disabled passengers from sitting on the upper deck when booking a seat with an operator, who offers seats on such aircraft types. Similarly, extremely obese passengers could not be seated together to prevent extra strain on the seating structure and to ensure that, in case of an evacuation, those passengers do not block the aisles. In addition, one of the most effective mitigating measures, which is to surround SCPs with the maximum number of passengers capable of assisting in case of an emergency would not be as effective. As explained above, this option has been validated by numerous studies and evacuation tests, but from a social point of view, limits the free choice of seating due to safety reasons.

Those cases where group seating is not possible are, however, limited and would apply mainly to extremely obese passengers and non-ambulatory passengers.

Another negative social impact would be the case of a family having bought two seats in business class for the parents and two seats in economy class for their underage children. As this happens quite frequently, according to information received from operators, the AMC that requires those children to be regarded as unaccompanied children because they are separated from their accompanying adult(s), could lead to additional costs for the individual family. However, it would not exclude those families from access to air transport since they could avoid those costs if they had booked as a family in one class of cabin or if they ensure that a child is always seated next to the accompanying adult/guardian.

On the other hand, the additional AMC to ensure that the safety assistant is seated where it is most convenient to assist the passenger has a positive social impact since a safety assistant will most likely also carry out comfort-related tasks during the course of a normal flight.

Option 2 (score -5) has a high negative social impact because this option would establish mandatory seating requirements depending on the level of self-reliance of the individual SCP concerned, the aircraft type used for the flight, and the number of emergency exits available. Since mandatory requirements will have to be applied in a conservative manner, this will limit the seat availability in actual air operation for SCPs, who would have to demonstrate whether they fall into a certain self-reliance category. From a social point of view, the detailed questions regarding their disability that SCPs might have to answer as a consequence of this option can be perceived to be discriminatory, leading to the high negative social impact score.

For stretcher occupants, Option 2 has no social impact.

Combined social impact summary

Limiting group seating of SCPs has a negative social impact because in some limited cases, SCPs who booked as a group will not be able to sit together as a group if they are not travelling with a safety assistant. However, this negative social impact is outweighed by the positive safety impact that those passengers will be surrounded by the maximum number of passengers capable of assisting in case of an emergency. Evacuation tests have demonstrated that such a seating allocation is preferred. In addition, tests have shown that the interaction of SCPs, who are not able to assist themselves in an emergency situation, and are seated together in a group, can create unsafe situations, i.e. by blocking the aisles, and has a considerable negative impact on the evacuation speed and the survivability of all passengers. Therefore, the negative social impact has to be balanced against the positive safety impact.

4.8.4 Economic impact

4.8.4.1 Maximum number of SCPs on board

Option 0 (score 0) has no economic impact.

Option 1 (score 0) has no economic impact since the additional guidance allows operators to develop procedures that take into account that passengers capable of assisting SCPs in case of an emergency evacuation should have no other role that would

prevent them from assisting the SCP. The operator's procedure will then be included in the overall training of cabin crew.

Option 2 (score -3) has a medium negative economic impact since a separate limit that depends on the level of self-reliance of the individual SCP concerned, the aircraft type used for the flight, and the number of emergency exits available, would require considerable resources from the operator to establish such limits for its fleet/operation.

4.8.4.2 Seating allocation for specific SCPs

Option 0 'do nothing' (score 0) has no economic impact.

Option 1 (score -1) has a low negative economic impact since operators would have to provide additional training to crews on seating allocation guidelines and procedures and in some instances amend the reservation system to ensure that a safety assistant is seated nearby the passenger travelling with him/her and that some passengers (e.g. extremely obese passengers and non-ambulatory passengers) are not seated together. On the other hand, some operators may already have done this as a result of disability rights guidance or legislation. Seating allocation guidelines that cannot be applied before boarding the aircraft, i.e. at the booking or check-in stage, may lead to re-seating of passengers inside the aircraft. This can have a negative economic impact in cases where such a reseating would extend the turnaround time of the aircraft. However, it is assumed that the operator will adjust the specific seating allocation guidance to the cabin layout and the seats available. By proposing seating allocation recommendations in Guidance Material (GM), it is acknowledged that the recommended ideal seating might not always be possible.

For the individual passenger or family, the proposal that children, who are flying in another class of cabin than their accompanying adults (parents), should be regarded as unaccompanied children, could increase the cost of the overall ticket if the operator charges for the additional services and procedures associated with an unaccompanied child's programme. However, such increased costs, if they arise, could be avoided by booking a ticket for the whole family in a single class of cabin or by ensuring that one parent (guardian) is seated next to the child.

Option 2 (score -3) has a medium negative economic impact because it would require mandatory seating requirements which can only be fulfilled with costly passenger screening systems and could result in passengers having to be offloaded to ensure compliance with seating allocation requirements. Depending on the level of self-reliance of the individual SCP concerned, the aircraft type used for the flight, and the number of emergency exits available, the operator would have to allocate certain seats to certain passenger groups. The mandatory nature of the seating requirements makes it very difficult for the operator to adjust the seating to the operation.

4.8.5 Regulatory coordination impact

4.8.5.1 Maximum number of SCPs on board

Option 0 'do nothing' (score 0) has no impact on regulatory coordination.

As a result of the Air OPS Regulation and in line with the safety management principles advocated by this Regulation and the respective set of rules governing SCPs, European

operators do have the possibility to apply limitations on the maximum number of SCPs carried, provided that the risk assessment, based on the four factors mentioned in AMC1 CAT.OP.155(b) justifies such a limit. Yet, today, many European operators, who carry passengers on routes to and from the United States, apply the U.S. Department of Transport rules, in the absence of harmonised European safety requirements. Compliance with U.S. Department of Transport rules also includes a requirement which prevents carriers from establishing any maximum limit[54]. This, however, contradicts the AMC of the Air OPS Regulation (AMC1 CAT.OP.MPA.155(b), which states that the 'number and categories of SCPs, should not exceed the number of passengers capable of assisting them'. In the past, and before the Air Ops Regulation, EU operators referred to JAA Guidance Material[55]. However, such guidance material was not considered to be binding legislation and, therefore, did not qualify as a binding or similar safety requirement.

Option 1 (score 0) which provides guidance when selecting passengers capable of assisting an SCP in case of an emergency, does not impact on regulatory coordination for the same reasons as stated in Option 0.

Option 2 (score -3) has a medium negative impact on regulatory coordination. A separate strict limit that depends on the level of self-reliance of the individual SCP concerned, the aircraft type used for the flight, and the number of emergency exits available, contradicts the U.S. Department of Transport requirements that do not foresee any limit.

4.8.5.2 Seating allocation for specific SCPs

Option 0 'do nothing' (score 0) has no impact on regulatory coordination.

Option 1 (score +1) develops several AMC and GM on seating allocation of specific SCPs subcategories. Such guidance is not included in the U.S. Department of Transport rules and, therefore, has no impact on regulatory coordination. However, this option to seat the safety assistant nearby the SCP aligns with the International ICAO Standards and Recommended Practices[56] which state that the accompanying person should, whenever possible, receive a seat next to the disabled passenger. For this reason, the option has a low positive impact on regulatory coordination.

---

[54] See U.S. Department of Transportation, 14 CFR Part 382, Non-discrimination on the Basis of Disability in Air Travel, § 382.31 Refusal of transportation point (c) A carrier shall not refuse to provide transportation to qualified individuals with a disability by limiting the number of such persons who are permitted to travel on a given flight.

[55] ACJ (Advisory Circular Joint) OPS 1.260: Carriage of [P]ersons with Reduced Mobility 1 A person with reduced mobility (PRM) is understood to mean a person whose mobility is reduced due to physical incapacity (sensory or locomotory), an intellectual deficiency, age, illness or any other cause of disability when using transport and when the situation needs special attention and the adaptation to a person's need of the service made available to all passengers. 2 In normal circumstances PRMs should not be seated adjacent to an emergency exit. 3 In circumstances in which the number of PRMs forms a significant proportion of the total number of passengers carried on board: a. The number of PRMs should not exceed the number of able-bodied persons capable of assisting with an emergency evacuation; and b. The guidance given in paragraph 2 above should be followed to the maximum extent possible.

[56] ICAO INTERNATIONAL STANDARDS AND RECOMMENDED PRACTICES, FACILITATION ANNEX 9 TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION, chapter 8

Option 2 (score -3) has a medium impact on regulatory coordination since strict seating requirements would contradict with requirements in other regions, e.g. the U.S. Department of Transport requirements.

4.8.6 Impact summary of seating allocation options

4.8.6.1 Maximum number of SPCs on board

Objectives/ criteria	***Weights***	**Scores (unweighted)**			**Scores (weighted)**		
		Option 0	Option 1	Option 2	Option 0	Option 1	Option 2
Safety	*3*	-1	+1	+3	0	+3	+9
Social	*1*	0	-1	-5	0	-1	-5
Economic	*1*	0	0	-3	0	0	-3
Regulatory coordination	*1*	0	0	-3	0	0	-3
Total		0	-1	-5	0	**+2**	-2

4.8.6.2 Seating allocation for specific SCPs

Objectives/ criteria	***Weights***	**Scores (unweighted)**			**Scores (weighted)**		
		Option 0	Option 1	Option 2	Option 0	Option 1	Option 2
Safety	*3*	-1	+1	+3	-1	+3	+9
Social	*1*	0	-1	-5	0	-1	-5
Economic	*1*	0	-1	-3	0	-1	-3
Regulatory coordination	*1*	0	+1	-3	0	+1	-3
Total		0	0	-5	0	**+2**	-2

4.9 Safety Assistant

4.9.1 Safety Assistant Options identified

Possible Risk Mitigation Measures **Definition of safety assistant (SA) & need for a safety assistant in certain limited cases**	
	Option 0: Do nothing: Partly addressed in Regulation (EC) No 1107/2006, which refers to applicable safety requirements. However, this Regulation does not define safety assistant or describe a situation where an SCP should travel with a safety assistant. In addition, rely on operator safety management and best practices.
	Option 1: 1. Establish new AMC to Part CAT based on the UK Code of Practice[57]. SCPs should only be required to travel with a safety assistant, when it is evident that they are not self-reliant and their carriage could pose a safety risk to themselves or other passengers. Notwithstanding Article 4.2 of Regulation (EC) No 1107/2006, a safety assistant could be required for passengers who are unable to: (a) unfasten their seat belt, or (b) leave their seat and reach an emergency exit unaided, or (c) retrieve and fit a life jacket, or (d) fit an oxygen mask without assistance, or (e) follow instructions given by the crew in an emergency situation. 2. Insert new definition in GM to Annex I (Definitions) to the Air OPS Regulation. 'Safety assistant' means a passenger, accompanying an SCP, who is at least 16 years old, and is physically and mentally able to: (a) follow crew instructions, (b) react in an appropriate manner in emergency situations on board the aircraft, and assist in an emergency situation and the evacuation of the SCP.

4.9.2 Safety impact

Option 0'do nothing' (score -1) foresees the status quo, i.e. no European-wide safety requirements or regulatory material for a safety assistant. This option relies on the operators' safety management and best practices. Today, procedures when a safety assistant is required are either based on the operator's judgement or are contained in national codes of best practice (see UK Code of Practice) or national requirements (e.g. Belgium or Ireland). However, these national codes of practice or operator procedures

[57] UK Department for Transport, Access to Air Travel for Disabled Persons and Persons with Reduced Mobility, Code of Practice, July 2008, p. 23.

have been challenged in recent court cases. This option has a low negative impact on safety, because without improved European safety measures the current situation would deteriorate, as the number of SCPs is expected to increase over time.

Option 1 (score +1), with a low positive safety impact, mirrors the UK CAA's Code of Practice[58] and states that a safety assistant is required when it is evident that the person is not self-reliant and this could pose a risk to safety. It should be noted that operators in accordance with Regulation (EC) No 1107/2006 cannot, as a rule, require medical certificates from a Person with Reduced Mobility (PRM) as proof of their disability or as pre-condition for selling the ticket.

The rulemaking group decided to use the term 'safety assistant' instead of the term 'accompanying person'. The term 'safety assistant' cannot be confused with a 'carer' who might assist the SCP for medical or comfort reasons during the flight. This option provides some safety related examples that assist the passenger in understanding the need for a safety assistant or indeed where a safety assistant would not be called for.

Passengers travelling in a stretcher or incubator will often require medical attention during the flight and, therefore, by definition will travel with at least one safety assistant, if not more. Passengers, who because of a severe mental disability are unable to follow crew instructions, including the safety briefing, would also require a safety assistant. As in the US, European Air OPS rules require a safety briefing of passengers[59]. A passenger, who is able to follow crew instructions or to respond to safety instructions, would not require a safety assistant[60]. On the other hand, passengers with mobility impairment so severe that the person is unable to physically assist in his or her own evacuation of the aircraft would require a safety assistant. The proposed AMC regarding a safety assistant is limited in scope and would only apply to severely disabled passengers since, for example, a passenger whose lower limbs are disabled, could still assist in his/her own evacuation, provided that there is upper body strength to allow for an evacuation. A blind passenger or a deaf passenger would not require a safety assistant, whereas a passenger who has both severe hearing and severe vision impairments, and, therefore, cannot establish any means of communication with the crew, would need a safety assistant.

This option is supported by a study commissioned by the European Commission on the implementation of Regulation (EC) No 1107/2006, which states that: '*the Commission*

---

[58] UK Department for Transport, Access to Air Travel for Disabled Persons and Persons with Reduced Mobility, Code of Practice, July 2008, p. 23.

[59] See: CAT.OP.MPA.170 Passenger briefing and related AMCs. CAT.OP.MPA.170 Passenger briefing. The operator shall ensure that passengers are: (a) given briefings and demonstrations relating to safety in a form that facilitates the application of the procedures applicable in the event of an emergency; and (b) provided with a safety briefing card on which picture-type instructions indicate the operation of emergency equipment and exits likely to be used by passengers.

[60] The US requirements under 14 CFR Part 382 of the U.S. Department of Transportation permit the need for a safety assistant in very limited cases, including the case where 'a person who, because of mental disability, is unable to comprehend or respond appropriately to safety instructions from carrier personnel including the safety briefing' see § 382.35 Attendants of Part 382 of the US Department of Transport.

should work with EASA to determine safe policies on carriage of PRMs <..> in particular on circumstances under which PRMs are required to be accompanied)'[61].

A safety assistant who is physically and mentally able to assist an SCP, increases the SCP's survivability in case of an emergency situation. The safety assistant can assist the SCP to exit the aircraft before smoke development, since smoke and fire pose a serious risk to the survivability of the SCP as well as all other occupants. For this reason, this option also establishes:

— a standard definition to ensure that the safety assistant is physically and mentally able to assist the SCP in case of an emergency situation; and

— a minimum age of at least 16 years, to ensure that the safety assistant has the mental and physical maturity to assist.

Combined safety impact summary

— Clear and easy to understand European-wide AMC for SCPs travelling with a safety assistant.

— Operators to establish procedures for unaccompanied children that are not self-reliant. In this case, the operator should assess the safety risks of those unaccompanied children to ensure that they are assisted in case of emergency situations.

— Definition of a safety assistant, including a minimum age of 16 years.

— These options have a positive safety impact on the survivability of the individual SCPs and all other occupants in case of an emergency, while at the same time limiting the cases when a safety assistant would unnecessarily be required. By creating a harmonised set of examples to assess whether the SCP should travel with a safety assistant or not, these options also address the wide variations in airline policies on carriage of SCPs, in particular circumstances under which SCPs are required to be accompanied.

4.9.3 Social impact

Option 0, 'do nothing' (score -1), has a low negative social impact. For the individual SCP, the status quo is not satisfactory and is said to lead to social exclusion. Today, procedures when a safety assistant is required are either based on the operator's judgement or are contained in national codes of best practice or national requirements. Numerous different national requirements and recommendations have a medium negative social impact on the ability of SCPs to travel, as they need to know under what conditions they should travel, with a safety assistant or not. These conditions should also be based on a risk assessment.

Option 1 (score +1) resembles the UK CAA's Code of Practice and states that a safety assistant is required when it is evident that the person is not self-reliant and this could

[61] 'Evaluation of Regulation 261/2004' by Steer Davies Gleave on the application and enforcement of the Regulation on air passengers' rights in the EU Member States, June 2010, p. 5.

pose a risk to safety. The examples given are clear and easy to understand for both operators and passengers.

For some SCPs, who have travelled without a safety assistant until now, this option would have a personal negative social impact. Stakeholders are invited to comment on this option, which is also described in Question No 4 contained in the Explanatory Note to this NPA. When compared to today's situation, which is not harmonised, this option has a positive social impact. Today's travel experience for SCPs can result in confusing requirements, where a passenger on his or her outward trip would travel **without** a safety assistant and on the return flight is asked to travel **with** a safety assistant. Other reported cases include passengers, who are flying from the same airport but with different operators (airline companies) and find themselves unable to take a certain flight due to different requirements when flying with different operators.

This option, which includes new AMC for SCPs travelling with a safety assistant is based on some clear criteria. This would also mean that an SCP, whose upper limbs are disabled, but who is able to unfasten his or her seatbelt, to fit an oxygen mask or to put on a life-jacket would not need a safety assistant[62]. A European-wide standard definition of a safety assistant would define the safety assistant's key characteristics to ensure that he or she is physically and mentally able to assist the SCP in case of an emergency situation and is at least 16 years old. This means that in some cases where the accompanying person does not fall within the new definition of a safety assistant, he or she might not be able to accompany the SCP as a safety assistant. As a consequence, the SCP might have fewer choices for a safety assistant, which would be a negative social impact. In those limited cases, a young accompanying child would not qualify as a safety assistant, where the SCP cannot unfasten the seat belt, or leave the seat and reach an emergency exit unaided, or retrieve and fit a life jacket, or fit an oxygen mask without assistance, or follow instructions given by the crew in an emergency situation. While the cases where a passenger would not qualify as a safety assistant are very limited, the above example illustrates a possible scenario with a negative social impact for the individual SCP. From the cabin crew's point of view, this option has a low positive social impact since a safety assistant in certain limited cases reduces the workload for the cabin crew and potentially improves the well-being of the passenger and, as a result, of the cabin crew. Overall, this option receives a low positive score (+1) because it improves the travel conditions of some SCPs, compared to the current diverging situation.

4.9.4 Economic impact

Option 0,'do nothing' (score -1), has a low negative economic impacts for the following reasons:

— For the SCP traveller this option has a low to medium negative impact. Complaints received from passengers demonstrate that today's situation can lead to

[62] Disability rights organisations have stated that some passengers despite disability of the upper limb might be able to fit their oxygen masks, e.g. with their lower limbs and teeth. In addition, some passengers might also be able to fit a life jacket that does not have to be tied but instead is adjusted by means of clips.

unexpected costs, e.g. when a safety assistant (accompanying person) is not required on the outward flight, but is instead unexpectedly required on the return trip.

— For the operator, the status quo of different standards/national codes of practices has a low negative impact due to legal uncertainty. In the absence of European regulatory material regarding safety assistants, the operator has no legal certainty whether adhering to a national code of practice or the operator's procedures is valid from a safety point of view. Recent court cases have ruled against operators who applied procedures based on national code of practice.

Option 1 (score -1) proposes a new AMC when a safety assistant is needed and is based on the UK Code of Practice. This option has a low negative economic impact for the following reasons:

— For the SCP traveller, looking at the global impact spread over the entire SCP population, this option has a low negative economic impact, since only very few SCPs, who had the intent to travel unaccompanied from the outset, will be affected by an imposed need to travel with a safety assistant. It is noted, however, that this option has a potentially high negative impact for the individual SCP requiring assistance[63].

— For the operator, the proposed AMC for a safety assistant in those limited cases where the SCP requires a safety assistant, but has not booked a ticket together with the safety assistant, could lead to time-consuming efforts. The economic costs of additional time and resources has a medium negative economic impact for the operator, but has to be weighed against the status quo, which also has a low negative economic impact due to the legal uncertainty of operator procedures and national codes of practice. It must also be noted that Article 4(3) of Regulation (EC) No 1107/2006 obliges air carriers to make publicly available, in accessible formats, their applicable safety requirements and, therefore, also the conditions under which a safety assistant would be required. Where air carriers fully comply with these information requirements, the negative economic impact would be reduced.

4.9.5 Regulatory coordination impact

Option 0 (score -0) has no impact on regulatory coordination since the status quo is not aligned with the U.S. Department of Transportation rule, which has established safety requirements for a safety assistant.

Option 1 (score +1) has a low positive impact on regulatory coordination. The proposed AMC regarding a safety assistant is similar to the U.S. Department of Transportation requirement. Unlike the U.S. Department of Transport rule, this option also defines the key characteristics of a safety assistant. This option will not apply to US operators, but

[63] This RIA disregards whether the operator provides tickets for safety assistants at a reduced fare. Since operator policies differ across Europe, this RIA cannot assess the economic impact of reduced fare tickets but instead assumes that a safety assistant, if booking the flight together with the SCP, will purchase a ticket at the normal fare.

will align the safety requirements of EU and US operators. Despite this alignment, the concrete wordings of the US and the EU requirements regarding a safety assistant are different. The proposal of this NPA and the U.S. Department of Transportation rule have a similar intention, but they use different wordings to describe the situation when a safety assistant is required. The U.S. Department of Transportation requirement when a safety assist assistant is needed[64] does not list specific tasks, e.g. fastening/unfastening of seat belt, donning of oxygen mask, etc. that a passenger must be able to perform on his or her own. The rulemaking group favoured the wording of the UK Code of Practice with clear conditions when a safety assistant for safety reasons only can be required.

4.9.6 Impact summary of safety assistant options

Objectives criteria	***Weights***	**Scores (unweighted)**		**Scores (weighted)**	
		Option 0	Option 1	Option 0	Option 1
Safety	*3*	-1	+1	-1	+3
Social	*1*	-1	+1	-1	+1
Economic	*1*	-1	-1	-1	-1
Regulatory coordination	*1*	0	+1	0	+1
Total		-3	+2	-3	**+4**

4.10 Changes to Certification requirements

4.10.1 Certification Requirements Options identified

Possible Risk Mitigation Measures **For evacuation certification: include representative sample of SCPs in evacuation tests**	
	Option 0: Do nothing. Appendix J to CS 25.803 defines current requirements for evacuation demonstrations and requires 'a representative passenger load of persons in normal health'. Therefore, the requirements do not include PRMs per se, but account for an age and gender mix, as well as several dolls to represent infants. These tests performed by manufacturers are a worldwide benchmark used to measure and compare performance of aircraft cabin evacuation systems.

[64] See U.S. Department of Transportation, 14 CFR Part 382, Non-discrimination on the Basis of Disability in Air Travel, § 382.35 Attendants. The U.S. rule requires a safety assistant in the following limited circumstances and for safety reasons only, for a passenger:
(a) travelling in a stretcher or incubator,
(b) who, because of a mental disability, is unable to comprehend or respond appropriately to safety instructions from the crew, including the safety briefing'
(c) with a mobility impairment so severe that the person is unable to physically assist in his or her own evacuation of the aircraft;
(d) who has both severe hearing and severe vision impairments.

	Option 1: Change evacuation certification requirements, and add SCPs in future evacuation modelling testing taking into account the following SCP subcategories: (a) Infants (b) Extremely obese (c) Physically disabled (upper limbs) (d) Physically disabled (lower limbs) (e) Physically disabled (aided walking) (f) Physically disabled (paralysed lower limbs).
Change certification requirements for minimum number of cabin crews to determine the minimum number of cabin crews in operational rules depending on the number of SCPs on board	
	Option 0 : Do nothing and rely on operator safety management. Air OPS rules (see the Air Ops Regulation) already require a management system (ORO.GEN.200) and identification of aviation safety hazards by the operator. Based on AMC1 CAT.OP.MPA.155, the operator should take into account 'any other factor(s) or circumstances possibly impacting on the application of emergency procedures by the operating crew members' when defining the conditions under which SCPs can be carried on board.
	Option 1: Change the existing minimum cabin crew requirements in operational and certification rules to mandatorily increase the number of certified minimum cabin crew in relation to the number of SCPs on board and in relation to the evacuation delaying effects of certain SCPs.

4.10.2 Safety impact

4.10.2.1 Include representative sample of SCPs in evacuation tests

Option 0, 'do nothing' (score +0), has no additional impact on safety and is based on the status quo. The requirements for evacuation substantiation are recognised as a worldwide baseline performance measure against which different aeroplanes may be compared. Those involved in evacuation certification are aware that 'real life' evacuations differ from the manufacturers' test. Evacuation tests for certification purposes are a risk-based model that is harmonised worldwide ensuring a high safety level. Those tests cannot predict all of the possible real-life evacuation scenarios that could happen. As a result, there is no research data that supports changing the evacuation certification requirements. In addition, including a representative sample of SCPs in evacuation tests would not provide concrete information on behavioural patterns of unprepared real-life evacuations since evacuation tests do not investigate the behaviour of different sets of passengers but develop a standard for aircraft design and require the evacuation of all passengers within a certain time frame under certain conditions (e.g. blocked doors). The rulemaking group recommended that any future efforts in this area would require an industry team consisting of manufacturers, airlines,

and multiple regulatory agencies based on the latest and updated research data to study and develop recommended changes to existing requirements[65].

Option 1 (score -3) has a medium negative impact on safety and foresees a change of existing worldwide certification requirements by including different SCP subcategories during evacuation tests. Today's evacuation tests require real-life tests with real test persons. This option would include a given number of SCPs, including non-ambulatory passengers, or would be based on using test dummies to represent the SCPs population. Such a change in evacuation test procedures would entail a departure of the global standard. A change to today's robust and stable safety model might also entail a certain safety risk, since the benchmark model, which is based on a track record of historical data, could become less reliable if it were to be changed. Today, the evacuation test is a test of evacuation concepts. If the test is changed, it would be a change to those certification concepts and it would make it more difficult to compare evacuation performance of different aircraft.

Since today's tests are conducted with dolls representing infants there is no data on potential actual injuries to SCPs as a result of evacuation tests.

4.10.2.2 Change certification requirements for minimum number of cabin crews

Option 0, 'do nothing' (score 0), has no safety impact. Today, in accordance with the Air OPS Regulation cabin crew are trained in passenger and crowd handling to ensure the maximum number of passengers evacuate the aircraft in case of an emergency evacuation. The Air OPS Regulation also establishes a safety management system, that identifies any potential risks and hazards, including the potential risks due to carriage of SCPs. In addition to the management system requirements to identify and manage risks, point (d) of AMC1 CAT.OP.MPA.155(b), states that the operator should take into account all factor(s) or circumstances possibly impacting on the application of emergency procedures by the operating crew members when establishing the procedures for the carriage of SCPs. Therefore this option of 'doing nothing' has to be seen in the context of the above mentioned regulatory requirements and AMC.

Option 1 (score +1) has a low positive safety impact. This option would simply add more cabin crew to the number of passengers whenever a certain number of SCPs is on board at a given flight. In some cases, this could result in a faster evacuation of passengers whenever certain subcategories of SCPs are on board[66], who would decrease the evacuation efficiency. It is, however, questionable if there is a direct general link between an increased number of cabin crew and faster evacuation of SCPs.

The most important role of cabin crew in case of an evacuation is to manage the evacuation, give orders and instructions to passengers, and most importantly to man

[65] The Agency's future rulemaking task RMT.0068 will look into additional airworthiness specifications for operations: Type III Emergency exit access and ease of operation. It is expected to commence in 2014. See Agency Rulemaking Programme 2013-2016.

[66] See TÜV Rheinland study, page 136, which determined that evacuation efficiency increases with the number of cabin crew.

the exits. According to the findings of the analysed studies and the risk assessment, the cabin crew should be responsible primarily for the evacuation of the entire aircraft and only then for the evacuation of individuals. According to the TÜV Rheinland study[67]:*'cabin crew should be responsible primarily for the evacuation of the entire aircraft and only then for the evacuation of individuals. It is not recommended to task the cabin crew primarily with the evacuation of SCPs or to obligate them to assist.'*

Therefore, cabin crew's primary task is the evacuation of all passengers and to oversee the full evacuation. Only after evacuation of the aircraft and if time allows (taking into account that smoke in the cabin is life-threatening after 60 seconds), could cabin crew assist individual passengers to evacuate, provided that this does not endanger their own life. A study by the UK CAA[68] refers to a statistical relationship between the number of operational cabin crew members and evacuation efficiency. Based on the available studies, the TÜV Rheinland study concluded that it would be possible that additional cabin crew had a compensating effect. However, there are no available studies pointing towards a direct link between the cabin crew efficiency and the disability of the passengers, who have successfully been evacuated. In addition, due to the low pre-notification rates of less than 50 % and due to different cabin layouts and passenger profiles for each given flight, it would be impossible to determine a minimum cabin crew to SCPs ratio that would apply in all cases.

4.10.3 Social impact

4.10.3.1 Include representative sample of SCPs in evacuation tests

Option 0, 'do nothing' (score 0), does not have a social impact on the participants of an emergency test.

Options 1 (score 0) has no social impact. By including SCPs, especially non-ambulatory passengers, as test persons, there is a risk of injuries to those test persons. On the other hand, SCPs test persons can be replaced with dummies or dolls.

4.10.3.2 Change certification requirements for minimum number of cabin crews

Option 0, 'do nothing' (score 0) relies on the status quo and the application of safety management principles and existing AMC, which in AMC1 CAT.OP.MPA.155(b) of the Air Ops Regulation already states that the operator should take into account 'any other

[67] According to the findings of the analysed studies and the risk assessment, the cabin crew should be responsible primarily for the evacuation of the entire aircraft and only then for the evacuation of individuals. It is not recommended to task the cabin crew primarily with the evacuation of SCPs or to obligate them to assist. The legal status of the cabin crew (liability) in the event of evacuations is not clear. The decision to assist should remain a situation-dependent, subjective decision by the cabin crew' TÜV Rheinland study, page 135.

[68] A study by the UK CAA entitled 'A Database to Record Human Experience of Evacuation in Aviation Accidents' also refers to a statistical relationship between the number of operational cabin crew members and evacuation efficiency. For the six accidents considered, the authors noted that when there is a small number of crew available to control the evacuation, passengers tend to fail to make use of their optimal exits and tend to travel significantly further than is necessary in order to evacuate. (CAA Paper 2006/01).

factor(s) or circumstances possibly impacting on the application of emergency procedures by the operating crew members'.

— For the individual SCP, this option does not automatically lead to an increase in the number of cabin crew because the operator may well use other risk mitigating measures whenever SCPs are on board. Where the operator decides to increase the number of cabin crew, the SCP might get better attention and treatment during the flight thus improving access to air transport and well-being of the SCP.

— From the point of view of the individual cabin crew, an increase in the number of cabin crew on a given flight means that the workload of the individual cabin crew member is reduced, leading to a small positive social impact due to less stress at the workplace. How this reduction in stress at the workplace impacts on the safety and health of the individual cabin crew employee is, however, difficult to quantify.

Option 1 (score +1) has a small positive social impact stated. A change to the existing minimum crew certification requirements in certification rules would result in a mandatory increase in the number of certified minimum cabin crew, compared to the minimum numbers currently prescribed in the Air OPS Regulation[69]. This option would automatically require an increase in the number of cabin crew whenever SCPs are on board depending on the severity of the SCPs' disability. From a social point of view, for both SCPs, who would receive more attention during a normal flight, and cabin crew, whose workload would be diminished, this could result in a positive impact on their workload or on their well-being.

4.10.4 Economic impact

4.10.4.1 Include representative sample of SCPs in evacuation tests

Option 0, 'do nothing' (score +0) is presumed to have no economic impact as it maintains the status quo.

Option 1 (score -5) has a high negative economic impact. At EU level, a major change in evacuation certification standards, if it is not shared worldwide, would have a high negative economic impact. If the certification standards would be changed, there would be a double negative effect:

— EU manufacturers would have to sell their products by complying with two safety evacuation standards, resulting in an increase of aircraft certification (and potentially production costs if aircraft design have to be changed). This would endanger the EU aircraft industry activity.

— At European airlines operator level: European airlines would have to buy the more expensive EU compliant aircraft due to the change in certification.

In both cases, the EU manufacturers and operators would face economic disadvantages.

[69] See Commission Regulation (EU) No 965/2012, ORO.CC.100 Number and composition of cabin crew.

Therefore, a change to the Certification Specifications (CS), which is currently applicable worldwide, would lead to increased costs for European and non-European aircraft manufacturers, who would have to apply two different certification requirements for evacuation tests to ensure the operators using those aircraft that they could be used globally.

4.10.4.2 Change certification requirements for minimum number of cabin crew

Option 0, 'do nothing' (score 0), has no negative economic impact because the operator can decide to mitigate the risk either by increasing the number of cabin crew or by other means such as passenger briefing, crew training, seating allocation measures, etc. The existing rule text requires the operator to identify aviation safety hazards stemming from its operation (ORO.GEN.200) and to assess the factors impacting on the application of emergency procedures by the operating crew members when establishing procedures for the carriage of SCPs (AMC1 CAT.OP.MPA.155(b)). This means that the operator will make an informed decision whether additional cabin crew are needed on flights with a significantly large number of SCPs travelling without a safety assistant.

Option 1 (score -5) has a high negative economic impact. By requiring a change in certification requirements leading to an automatic increase in the number of cabin crew, whenever SCPs are on board, the operator would practically have to increase the number of cabin crew on all flights, because pre-notification rates are very low. Pre-notification rates of SCPs who notify the operator about their special needs are normally less than 50 %[70]. For this reason, a change in the certification requirements whenever SCPs are carried would lead to an increase of the minimum number of cabin crew on all flights to cater for the eventuality of a higher number of SCPs on board. Increasing the required number of cabin crew would also require more locations on the aircraft to accommodate additional cabin crew to be stationed resulting in updates to cabin configurations to provide those seats and likely loss in passenger seats and revenue to provide space for those crew seats. All of the above is leading to the high negative economic impact.

4.10.5 Regulatory coordination impact

4.10.5.1 Include representative sample of SCPs in evacuation tests

Option 0, 'do nothing'(score 0), has no impact as it maintains the status quo of a well-established and worldwide benchmark for evacuation tests.

Option 1 (score -5) has a high negative impact. The US existing certification requirements regarding evacuation demonstration (14CFR 25.803 appendix J) are aligned with the Agency's certification specifications in CS.25.803. Therefore, a change

[70] Information from ACI-Europe during ECAC meeting 12-13 March 2013 in Paris, see summary of decisions FAL-PRM-SG/51-SD. Regulation (EC) No 1107/2006 stipulates that the operator will always have to make all reasonable efforts to enable an SCP to travel by air, even if the passenger does not pre-notify. This means that unlike the U.S. Department of Transportation requirements, mandatory pre-notification is not required under Regulation(EC) No 1107/2006.

in the certification specifications in Europe would create discrepancies with other benchmark standards such as the US standard of 14 CFR 25.803. The option of including a representative sample of SCPs in evacuation tests and to change the current benchmark evacuation test certification is, therefore, attributed with a high negative impact score.

4.10.5.2 Change certification of minimum number of cabin crew

Option 0, 'do nothing' (score 0), does not have an impact on regulatory coordination.

Option 1 (score -3) has a medium negative impact on regulatory coordination since this option would change the aligned certification rules regarding the minimum number of cabin crew.

4.10.6 Impact summary of changes to certification requirements

4.10.6.1 Include representative sample of SCPs in evacuation testing

Objectives/ criteria	***Weights***	**Scores (unweighted)**		**Scores (weighted)**	
		Option 0	Option 1	Option 0	Option 1
Safety	*3*	0	-3	0	-9
Social	*1*	0	0	0	0
Economic	*1*	0	-5	0	-5
Regulatory coordination	*1*	0	-5	0	-5
Total		0	-13	**0**	-19

4.10.6.2 Change certification requirements for the minimum number of cabin crew

Objectives/ criteria	***Weights***	**Scores (unweighted)**		**Scores (weighted)**	
		Option 0	Option 1	Option 0	Option 1
Safety	*3*	0	+1	0	+3
Social	*1*	0	+1	0	+1
Economic	*1*	0	-5	0	-5
Regulatory coordination	*1*	0	-3	0	-3
Total				**0**	-4

4.11 Comparison and conclusion

A summary of the retained options of this RIA can be found in Table 1 of the Explanatory Note to this NPA. When comparing the different options of the RIA, it is evident that the most efficient mitigating measures to increase safety of SCPs and all passengers can be addressed via additional AMC and GM in the operational rules. The proposed amendments to the operational rules can also be summarised as a package (Package No 1) comprising the following mitigating measures with a combined positive impact:

(a) Adequate briefing for some SCPs, e.g. on most suitable exits, will improve safety, because the briefing will prevent delays in eventual evacuation or delaying behaviour in an emergency situation, which presents a safety risk for the SCPs and all other passengers;

(b) Better training of cabin crews will improve safety;

(c) Appropriate seating will prevent serious delays in evacuation of passengers or risk to other passengers sitting in the vicinity of SCPs;

(d) The proposal on safety assistants establishes a definition of a safety assistant and when a safety assistant should be required in certain limited cases.

In a second package (Package No 2), this RIA assessed the safety risks stemming from certification requirements, such as evacuation test requirements and specific certification elements, such as minimum f cabin crew number.

When compared to the safety risk mitigating measures mentioned in the OPS domain of Package No 1, i.e. passenger briefing, cabin crew training, passenger seating and safety assistants in limited cases, a comparison of Package No 1 and Package No 2 concludes that a change in certification requirements whenever SCPs are carried is not called for. The measures contained in Package No 1 contain more efficient mitigating measures. In addition, any change in certification requirements could have a negative impact on the aviation system, which is built on harmonised certification benchmarks and the data obtained from harmonised certification tests. Regarding an increase in the minimum number of cabin crew whenever SCPs are carried on board, the RIA states that pre-notification rates are below 50% making it impossible for operators to estimate the number of cabin crews required before a certain flight. In addition, according to the TÜV Rheinland study: *'cabin crew should be responsible primarily for the evacuation of the entire aircraft and only then for the evacuation of individuals. It is not recommended to task the cabin crew primarily with the evacuation of SCPs or to obligate them to assist.'* With regards to cabin crew, more effective mitigating measures, such as training of cabin crew, will have a positive impact on safety.

Table 2 below highlights the different options and summarises the individual impact assessments contained in the RIA subparts. The table demonstrates that the combined safety, economic, social and regulatory coordination impacts for the proposed changes to Air OPS requirements as outlined above for Package No 1 are positive, whereas the certification related options are either neutral or would have a negative overall impact.

In addition to the detailed impacts in Table 2 below, an overall conclusion can be established based on the general criteria for evaluating policy options (effectiveness, efficiency and coherence):

— The chosen options have been selected based on which are the most effective ones in terms of safety (briefing for some SCPs, training of cabin crews, appropriate SCP seating to prevent evacuation delays, SCPs travelling with safety assistants);

— The chosen options ensure efficiency by providing the above-mentioned safety benefits as well as positive social impacts to individual passenger groups and cabin crew (improvement of the air transport accessibility and cabin crew training) and minimising potential negative economic impacts to operators (in the field of certification and minimum number of cabin crew); and

— Overall, the selected options are coherent not only with the safety objective of the Basic Regulation, but also with the overarching objectives of the EU anti-discrimination policy framework established by Regulation (EC) No 1107/2006[71], which ensures that passengers with disabilities or reduced mobility (PRM) have equal access to air transport. The selected options are limit trade-offs across the economic, social, and environmental domain.

[71] Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air (OJ L 204, 26.7.2006, p. 1).

Table 2 - Overview of the impacts per option (safety impacts receive a positive weighting of x3)

Issue	Options	Option description	Safety impacts-weighted	Social impacts	Economic impacts	Regulatory coordination impacts	Overall impact
Passenger briefing – (a) SCP briefing procedure							
	Option 0	Do nothing. Rely on operator safety management. OPS.1.285 and CAT.OP.MPA.170 (already require a verbal and safety briefing card).	-3	0	0	0	-3
√	Option 1	Establish procedures for the pre-flight briefing of SCPs and their safety assistants regarding normal and emergency situations.	+9	+1	-3	+1	**+8**
Passenger briefing – (b) Develop procedure for planned emergency evacuation							
	Option 0	Do nothing. Rely on operator safety management.	-3	0	0	0	-3
√	Option 1	During pre-planned emergency situations, if time permits, relevant passengers are briefed by cabin crew on assisting SCPs.	+9	0	-1	0	**+8**
Cabin Crew training							
	Option 0	Do nothing. Rely on operator safety management.	-3	-1	0	0	-4
√	Option 1	Amend applicable cabin crew training programmes for recurrent training considering SCPs in normal and emergency procedures.	+9	+1	-1	0	**+9**
Seating allocation – (a) Maximum number of SCPs on board							
	Option 0	Do nothing. Rely on operator safety management.	0	0	0	0	0
√	Option 1	Clarify existing rule to ensure all emergency situations are taken into account when establishing SCP procedures. Explain meaning of 'passenger capable of assisting with an emergency', by stating that such passengers are those without any other role or private responsibility that would prevent them from assisting the SCP.	+3	-1	0	0	**+2**
	Option 2	Mandatory limit: limit number of SCPs who can be carried depending on the level of the individual SCPs self-reliance.	+9	-5	-3	-3	-2

Seating allocation – (b) Seating allocation for specific SCPs							
	Option 0	Do nothing. Rely on operator safety management.	-1	0	0	0	0
√	Option 1	Additional procedures on seating allocation for some SCPs	+3	-1	-1	+1	**+2**
	Option 2	Amend Part CAT to require mandatory seating requirements depending on the level of self-reliance of the individual SCP concerned, the aircraft type used for the flight, and the number of emergency exits available.	+9	-5	-3	-3	-2
Safety Assistant – Definition of safety assistant (SA) & need for a safety assistant in certain limited cases							
	Option 0	Do nothing, as this is partly addressed in Regulation (EC) No 1107/2006, and rely on operator safety management and best practices.	-1	-1	-1	0	-3
√	Option 1	In limited cases a safety assistant could be required as established in the UK Code of Practice.	+3	+1	-1	+1	**+4**
Certification requirements – For evacuation certification: include representative sample of SCPs in evacuation tests							
√	Option 0	Do nothing, as existing certification specifications are worldwide benchmarks, and define requirements for evacuation demonstrations.	0	0	0	0	**0**
	Option 1	Add SCPs in future evacuation modelling testing	-9	0	-5	-5	-19
Certification requirements –change certification requirements to determine minimum number of cabin crews depending on number of SCPs on board							
√	Option 0	Do nothing and rely on operator safety management. Existing requirements already foresee factor(s) or circumstances possibly impacting on the application of emergency procedures by the crew.	0	0	0	0	**0**
	Option 1	Change minimum cabin crew requirements to mandatorily increase number of certified minimum cabin crew in relation to number of SCPs on board and in relation to severity of the evacuation delaying effects of certain SCPs.	+3	+1	-5	-3	-4

5 References

5.1 Affected regulations

Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1) — Annex I (Definitions).

5.2 Affected CS, AMC and GM

Decision 2012/018/R of the Executive Director of the Agency of 24 October 2012 on acceptable means of compliance and guidance material to Commission Regulation (EU) No 965/2012 of 5 October 2012 – Acceptable means of compliance and guidance material to Annex IV – Part CAT

Decision 2012/017/R of the Executive Director of the Agency of 24 October 2012 on acceptable means of compliance and guidance material to Commission Regulation (EU) No 965/2012 of 5 October 2012 – Acceptable means of compliance and guidance material to Annex III – Part ORO

5.3 Reference documents

– TÜV Rheinland study on Carriage by Air of Special Categories of Passengers. EASA Contract Number EASA.2008.C.25. 1 December 2009. See also: http://www.easa.eu.int/rulemaking/docs/research/EASA%202008.C.25%20Final%20report%20Issue%201.1.pdf

  Please refer to **the extensive reference list** of the TÜV Rheinland study, pages 494-497, which has served as the basis of this NPA.

— Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1), as last amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 (OJ L 4, 9.1.2013, p. 34)

— Regulation (EC) No 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air (OJ L 204, 26.7.2006, p. 1)

— ICAO Annex 9 and Annex 6: Part I International Commercial Air Transport Aeroplanes; Chapter 4 Flight operations and Chapter 12 Cabin crew

— ECAC DOC No 30 (Part I), Section 5 and its Annexes A to G