



Acceptable Means of Compliance and Guidance Material to the rules of the air

RELATED NPA/CRD 2012-14 — RMT.0149 (ATM.001(b)) — 17/07/2013

Related Decision 2013/013/R

EXECUTIVE SUMMARY

This Decision addresses safety, proportionality and regulatory coordination issues related to the SERA Implementing Regulation (SERA IR).

The specific objective is to mitigate the possible risks linked to the implementation of the SERA IR if the content is not well understood and, therefore, the main objective is to provide Member States and stakeholders with AMC/GM to facilitate the implementation.

This Decision proposes AMC and GM derived from the following sources:

- relevant notes in ICAO Annex 2, 3 and 11;
- current practice in the EU Member States and on the basis of the requests for clarification received from the stakeholders during the various consultations conducted on the SERA material;
- comments and changes made by the Single Sky Committee during the comitology procedure.

The proposals are expected to improve harmonisation and to ensure compliance with ICAO.

This Comment-Response Document contains therefore the comments received during the public consultation and the responses provided by the Agency.

Applicability		Process map	
Affected regulations and decisions:	SERA Implementing Regulation	Concept Paper:	No
Affected stakeholders:	Member States; competent authorities/national supervisory authorities; ATM/ANS providers; airspace users (e.g. aircraft operators); aerodrome operators and EASA	Rulemaking group:	No
Driver/origin:	Legal obligations (Basic Regulation, EASp, and ICAO SARPs)	RIA type:	None
Reference:	N/A	Technical consultation during NPA drafting:	No
		Publication date of the NPA:	24/09/2012
		Duration of NPA consultation:	3 months
		Review group:	No
		Focussed consultation:	No
		Publication date of the Opinion:	N/A
		Publication date of the Decision:	2013/Q3

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1. Procedural information

1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed this Comment-Response Document (CRD) in line with Regulation (EC) No 216/2008¹ (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure².

This rulemaking activity is included in the Agency's Rulemaking Programme for 2013, under RMT.0149 (ATM.001(b)) 'Extension of the EASA system to safety regulation of Air Traffic Management (ATM) and Air Navigation Services (ANS) — Development of Acceptable Means of Compliance, Guidance Material and Certification Specifications. The scope and timescale of the task were defined in the related Terms of Reference (see process map on the title page).

The draft AMC/GM has been developed by the Agency with the support of EUROCONTROL and a group of experts as explained in Chapter IV, point iii, of the Explanatory Note of NPA 2011-02³. All interested parties were consulted through NPA 2012-14⁴, which was published on 24 September 2012. The consultation was carried out in accordance with Article 52 of the Basic Regulation and Articles 5.3 and 6 of the Rulemaking Procedure. 85 comments were received from interested parties, including air navigation services providers, national supervisory authorities, airspace users, military, industry, etc.

The text of this CRD has been developed by the Agency with the support of EUROCONTROL.

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

1.2. The structure of this CRD and related documents

This CRD provides a summary of comments and responses as well as the full set of individual comments (and responses thereto) received to NPA 2012-14. The resulting rule text is provided in Decision 2013/013/R which is published together with this CRD.

1.3. The next steps in the procedure

Taking into account the number of comments received and the scope of the AMC/GM, it has been decided to publish this CRD together with the ED Decision containing AMC and GM.

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 <http://easa.europa.eu/rulemaking/docs/npa/2011/NPA%202011-02.pdf>

⁴ <http://easa.europa.eu/rulemaking/docs/npa/2012/NPA%202012-14.pdf>

2. Summary of comments and responses

NPA 2012-14 has received 85 individual comments by 22 commentators. The figures below show the distribution and statistics of comments and type of commentators:

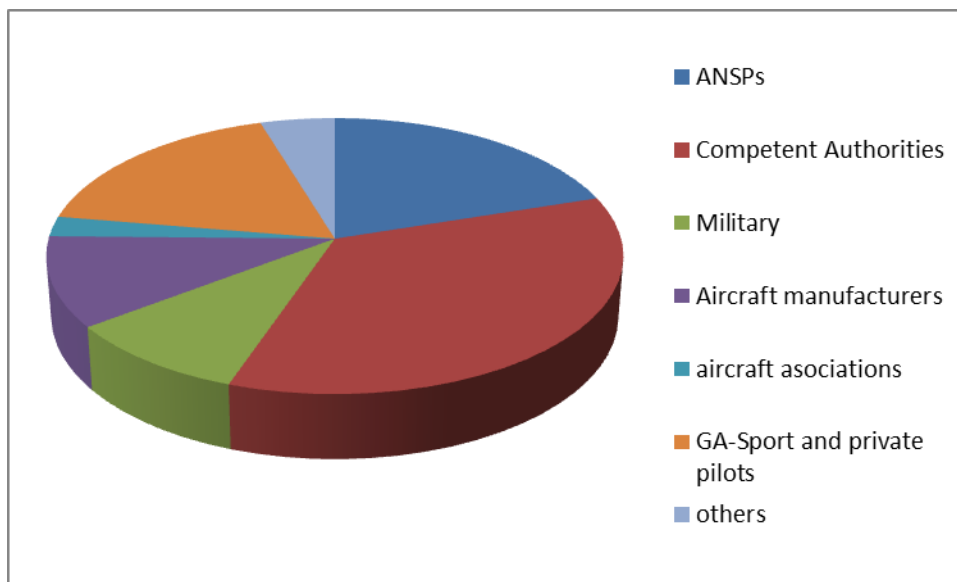


Figure 1: Distribution of comments per type of commentator

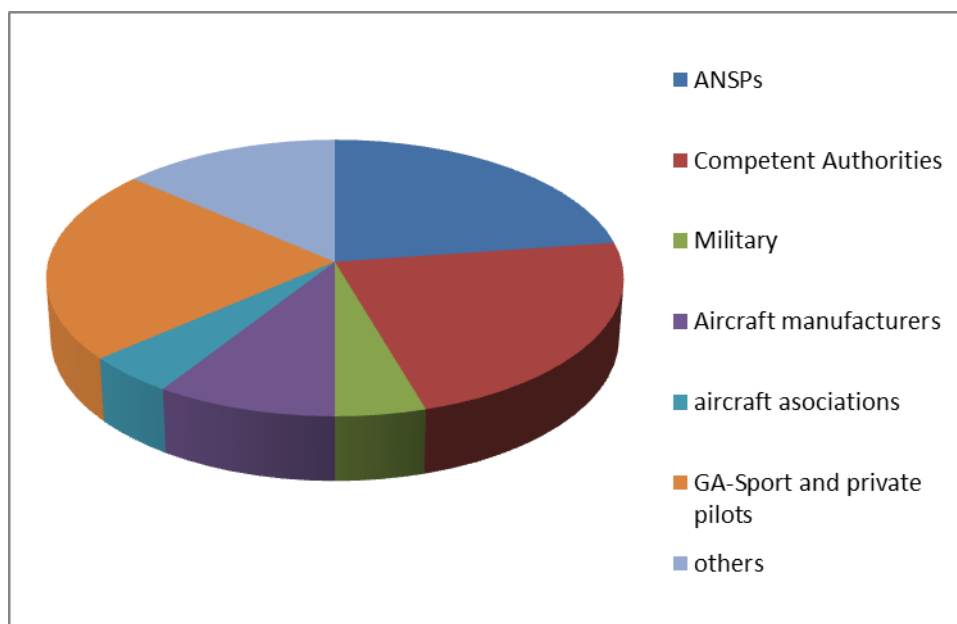


Figure 2: Statistics per type of commentators

Almost one third of the comments were made to the GM for the proposed definition. The rest of the comments were almost equally distributed between the various AMC/GM to Annex I to Commission Regulation (EU) No 923/2012 'Rules of the air'.

There were some comments related to the content of the implementing rule rather than to the proposed AMC or GM. These comments have not been accepted as they were considered to be out of the scope of the NPA consultation. The NPA consultation was about the proposed AMC/GM and the latest available version of the Implementing Regulation on

Standardised European Rules of the Air was appended to the NPA for information (until its publication in the *Official Journal of the European Union*). Indeed, Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (SERA IR) has already been adopted and published⁵.

There were some comments querying whether or not the AMC/GM were adding tasks to the competent authorities. These comments have not been accepted as it has been explained that the provided AMC/GM did not add more tasks to the competent authorities other than those already specified in the implementing rule itself or in other implementing rules (e.g. Implementing Regulation (EU) No 1034/2011 and 1035/2011).

As a result of the comments to the proposed GM to definitions of Article 2 of the SERA IR, the GM related to the definitions of 'altitude', 'flight level' and 'height' have been amended and a new GM to definition number 114 'Runway holding position' in Article 2 of the SERA IR has been added.

Comments related to the responsibilities for safe operations and for the way approvals are granted by the competent authority also resulted in some amendments to *GM1 and GM2 SERA.3105 Minimum heights*.

A few comments were made on the content of *GM1 SERA.3220(b) Simulated Instrument Flights – Safety pilots* as it was considered that the proposed GM repeated the intent of the IR. As a result, a new GM has been added to explain the notion of 'safety pilot' in the SERA IR.

A few comments to *AMC1 SERA.6001(d);(e);(f);(g) Classification of airspaces on Speed limitation – Safety assessment and approval by the competent authority* considered it to be too detailed for an AMC. Therefore, the Agency has redrafted the content of the proposed AMC and it has accepted the related comments urging for more general AMC. However, the previous content of the proposed AMC has been included in a new GM on the subject matter after the amendments made taking into account the comments.

A few comments were made on the initially proposed *GM1 SERA.8015(d)(4) Air traffic control clearances* which led to the deletion of the proposed GM as the content was not considered to be clear enough and further details of such a procedure are still under discussion within the ICAO framework on radio communication failure procedures.

⁵ OJ L 281, 13.10.2012, p. 1.

3. Individual comments (and responses)

In responding to comments, a standard terminology has been applied to attest the Agency's position. This terminology is as follows:

- (a) **Accepted** — The Agency agrees with the comment and any proposed amendment is wholly transferred to the revised text.
- (b) **Partially accepted** — The Agency either agrees partially with the comment, or agrees with it but the proposed amendment is only partially transferred to the revised text.
- (c) **Noted** — The Agency acknowledges the comment but no change to the existing text is considered necessary.
- (d) **Not accepted** — The comment or proposed amendment is not shared by the Agency.

(General Comments)	-
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comment	4	comment by: <i>LFV Sweden</i>
	LFV Sweden have no comments on the entire proposed amendment 2012-14 regarding AMC and GM to Part-SERA.	

response	<i>Noted</i>
	The Agency thanks the commentator for reviewing the NPA and for indicating that LFV Sweden does not have any comment.

comment	61	comment by: <i>Danish Transport Authority</i>
	This comment is intended <u>only</u> for EASA Administration, as I experienced problems of changing data via "My details" on the front page of the CRT 'Home-page'. Comments entered to this NPA is from: Danish Transport Authority Edvard Thomsens Vej 14 DK-2300 København S and entered by Flemming Christensen, Center of Civil Aviation, ATM/ANS-section.	

response	<i>Noted</i>
	Needs to be checked in more detail as to what it is the problem and if the problem persists.

comment	63	comment by: <i>Danish Transport Authority</i>
	This comment is related to SERA.6005 (a): Guidance material is missing with regard to RMZ – in general and in the application of RMZs related to the ICAO airspace classes. As RMZ is a new concept, the importance of sufficient guidance material is of utmost importance. This comment is related to SERA.6005 (b): Guidance material is missing with regard to TMZ – in general and in the application of TMZs related to the ICAO airspace classes. As TMZ is a new concept, the importance of sufficient guidance material is of utmost importance.	

response	<p><i>Noted</i></p> <p>In accordance with Annex 11, 2.26, 'States shall establish requirements for carriage and operation of pressure-altitude reporting transponders within defined portions of airspace.' This, in accordance with the note, is intended to improve the effectiveness of ATS as well as of ACAS. Similarly, the establishment of RMZ is already the practice in many areas, for example in aerodrome traffic zones and in other areas in Class G airspace. It is considered that the establishment of TMZ and RMZ is a longstanding practice albeit without the designations used in the IR. Therefore, no need for additional Guidance Material has been identified so far. However, this does not prevent the development of further Guidance Material in the future.</p>
comment	<p>77 comment by: <i>European Sailplane Manufacturers</i></p> <p>A third comment is about definition of aircraft flying in formation. Here our comment is that sailplanes often fly very near to each other due to the common use of updrafts (Thermals, ridge lift, wave lift) which should be not considered as formation flying, but also must not be forbidden by SERA rules. Therefore within AMC to SERA a wording like "flying between sailplanes at close distances is not considered as formation flights in the sense of SERA.3135" should be included.</p>
response	<p><i>Not accepted</i></p> <p>Although sailplanes may fly close to each other, there is no flight leader and there is no prearrangement between the pilots-in-command of the aircraft. Hence, it is apparent that this cannot be considered to be 'formation flights'. Therefore, this cannot be forbidden by the SERA IR as there is no minimum separation stipulated.</p>
comment	<p>78 comment by: <i>European Sailplane Manufacturers</i></p> <p>The manufacturers have another two comments, which are a general comments, with regard to the commenting phase of this NPA.</p> <p>We have seen a lot of NPA, where the commenting period has been extended for several reasons.</p> <p>Here with NPA 2012-14 this is not the case despite that the end of the commenting phase is on 24.Dec.2012.</p> <p>This leads to two comments from our side:</p> <p>1) It makes life for stakeholders much more difficult with regard to draft useful comments, if the regarding commenting phase is placed within a period of time where a lot of the people concerned are simply very hard to reach. A worst case interpretation is that EASA has no interest in good and useful comments because they mean more work for the rulemaking directorate. A much more moderate interpretation is that this is just bad manners and someone did not look at the date.</p> <p>In any case, we hope that in such a case the commenting period will be extended for two weeks because in this time certainly no one at EASA will work on it anyway.</p> <p>2) Nevertheless we wish everyone at EASA and especially at the Rulemaking Directorate a Merry Christmas and a Happy New Year!!</p>

response

Noted

In order to extend the consultation period a formal request should have been made to the Agency's Rulemaking Director. A comment in the Comment-Response Tool (CRT) is only looked at once the consultation period is over and, therefore, it has been too late for the Agency to extend the consultation period. The 3-month consultation period for this NPA was established in accordance with the EASA Rulemaking Procedure (excluding Christmas and New Year holidays).

comment

85

comment by: *DGA French flight test center*

The test flights are subject to specifications which result in technical clauses that must be validated.

It regards basically flight attitudes, flight levels, speed, manoeuvrability degradation, high rates of climb and descent, ground proximity and its obstacles, etc. When only one aircraft is involved in conducting such flight, it represents a case that is normally dealt with, observing compliance with respect to other users of

general air traffic. When more than one aircraft are conducting a test mission bearing the same profile, the necessary procedures to carry out such a mission are without prejudice to the terms of compliance with the

rules of general air traffic. Vertical and horizontal separations can be reduced between aircraft in test flights according to the necessities of test missions. Navigation features such as routes, flight levels, etc., are rarely contractual, and can normally go along with the existing flow of traffic. When the test profile bears contractual elements they are very accurate. In all cases, the test flights are conducted in a suitable

environment, with an ATC working position dedicated to each mission, with ATC radio frequency dedicated to the flight, preceded with pre tactical coordination set up with involved ATC units and tactical coordination elaborately carried out in real time.

The director of DGA EV is authorized to issue overruns under the rules in force, to an allowed extent in order to perform low level, high speed test missions.

If Test and Acceptance Air Traffic endeavoured to update its *modus operandi* to the various changes over the past decades, it is now necessary to find in the European context, auspicious conditions to perpetuate its know-how.

So, please find in Annex hereafter the proposals that DGA EV would appreciate to find in the CRD table of comments.

Jean-Luc Fourdrinier

Supervision and aeronautical regulation manager

DGA Flight Testing

France

Annex

COMMISSION IMPLEMENTING REGULATION (EU) No 923/2012 of 26 September 2012 - Article 2 Definitions - page 32.

Test flights are distinguished as follows:

1. **Development flight**: all tests performed under the direction or control of aeronautical industries or state or EASA officials, which seek for technical features in order to ensure aircraft development and the development of the aircraft components;

2. **Certification flights**: all tests performed under the direction or control of aeronautical industries or state or EASA officials, for the sole purpose of determining compliance of an aircraft and its components either to technical

specifications or airworthiness. They are performed in the framework of the process to obtain, renew or maintain airworthiness;

3. All tests performed on aircraft carrying a new component that might have an effect on the mass, aircraft balance, structural strength, reliability, operational characteristics or airworthiness;

4. The flight instruction for the acquisition of flight test rating;

Acceptance flights: all tests performed in flight in order to control the individual aircraft compliance with the type certification in the case of a civil aircraft or technical specifications in the case of a military aircraft or belonging to the State;

Technical flights: all flights other than test flights or acceptance flights as defined above, which are performed during the verification of the general performance of aircraft specified in the flight manual or the verification of certain functions of aircraft systems, after a technical inspection, intervention, repair, alteration or relocation of engines. They can also involve the aircraft flight requiring specific manoeuvres (e.g. performance validation or validation of ground facilities: calibration of radio, radar, radio beacons ...).

A definition for TA ATC could be as following:

Test and Acceptance Air Traffic Control Service means specialized ATC units providing

specially tailored air traffic control service with appropriate procedures in the European air space. It totally abides by the common rules, with special services and appropriate

procedures, every time it encounters General air traffic. It stands as one of the means to

achieve ATC from strategically established centres, in order to meet the needs of aircraft

builders and airlines.

COMMISSION IMPLEMENTING REGULATION (EU) No 923/2012 of 26 September 2012 - Article 2 Definitions 79

'flight plan' means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;

TA Profile: The test and acceptance profile stands in the stead of the flight plan and bears a list of suitable information related to the type of test that is conducted. This test and acceptance profile has a different format compared to the normal flight plan.

Flight over the high seas

SERA.1001 General (b)

For those parts of the high seas where a Member State has accepted, pursuant to an ICAO regional air navigation agreement, the responsibility of providing air traffic services, the Member State shall designate the ATS provider for providing those services.

Test and Acceptance ATS provider is mentioned by the French Member State to provide air traffic service over the high seas.

response

Not accepted

Although the Agency agrees with the intent of the comment, it is considered to be outside the scope of the subject NPA that is dealing only with the AMC and GM to the SERA Regulation. In other words, the content of the Regulation itself, which is already adopted and in force, was not for commenting in this NPA but only the content of the associated AMC and GM. Therefore, with this NPA the Agency is not able to amend the definitions and articles of the Regulation as proposed in the comment.

The subject is nevertheless addressed by the Agency in a separate NPA (NPA 2013-08).

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comment	30	<p style="text-align: right;">comment by: AESA / DSANA</p> <p>Regarding the document on the Acceptable Means of Compliance and Guidance Material to Part-SERA. Although it is said in some AMCs/GMs throughout the document, a general comment could be in relationship with the need of due safety assessments to be carried out by ATS providers preceding changes to the current procedures applied by them. This would also be in line with Regulation (EU) 1035/2011.</p>
response	<i>Not accepted</i>	<p>There is no need to further specify this in the GM because Commission Implementing Regulation (EU) No 1035/2011 applies also in this case and, therefore, any change to the operational procedures even if the driver is a new regulation would need to go through a safety assessment in accordance with the relevant requirements of Regulations (EU) No 1034/2011 and 1035/2011.</p>
comment	55	<p style="text-align: right;">comment by: Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)</p> <p>Guidance material is missing with regard to RMZ – in general and in the applikation of RMZs related to the ICAO airspace classes. As RMZ is a new concept, the importance of sufficient guidance material is of utmost importance. Guidance material is missing with regard to TMZ – in general and in the applikation of TMZs related to the ICAO airspace classes. As TMZ is a new concept, the importance of sufficient guidance material is of utmost importance.</p>
response	<i>Noted</i>	<p>In accordance with Annex 11, 2.26, 'States shall establish requirements for carriage and operation of pressure-altitude reporting transponders within defined portions of airspace.' This, in accordance with the note, is intended to improve the effectiveness of ATS as well as of ACAS. Similarly, the establishment of RMZ is already the practice in many areas, for example in aerodrome traffic zones and in other areas in Class G airspace. It is considered that the establishment of TMZ and RMZ is a longstanding practice albeit without the designations used in the IR. Therefore, no need for additional Guidance Material has been identified so far. However, this does not prevent the development of further Guidance Material in the future.</p>

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comment	5	<p style="text-align: right;">comment by: DFS Deutsche Flugsicherung GmbH</p> <p>DFS has no comments to this NPA.</p>
response	<i>Noted</i>	<p>The Agency thanks the commentator for reviewing the NPA and for indicating that DFS does not have any comment.</p>
comment	7	<p style="text-align: right;">comment by: René Meier, Europe Air Sports</p>

	<p>Europe Air Sports thanks the Agency for the preparation of NPA 2012-14. We looked at the presented texts from the point of view of operators of non-complex aircraft used in sports and recreational activities and for travelling.</p> <p>The European Powered Flight Union (EPFU) and the Aero-Club of Switzerland (AeCS) support Europe Air Sports positions taken.</p> <p>Thank you for considering our comments.</p> <p>A proposal to start with: May we propose to the Agency to insert a chapter containing all acronyms used as first chapter? In this NPA such an addition would have been an important help. We did not find the full-text-versions of "ARO" or of "IAF" to name just two of the many acronyms used.</p>
response	<p><i>Accepted</i></p> <p>Although the examples of the acronyms provided are not found in this NPA, the Agency is aware of the acronyms issue in aviation and will add dedicated GM in the future.</p>
comment	<p><i>11</i> comment by: <i>René Meier, Europe Air Sports</i></p> <p>We know that we are not entitled to comment on other texts than on the ones presented in the ones of page 1 to page 28. There are, however, some points which require, in our view, better wordings. We think of</p> <p>Page 40: Definition for "pilot in command": It is not necessarily the owner who is "pilot in command" in general aviation operations.</p> <p>Page 44: Exemptions for special operations: This should be co-ordinated with the texts of Part-SPO (which is not yet ready) to avoid confusion and inconsistencies.</p> <p>Pages 81 and 81: The presentations of the tables printed are not "user-friendly", please apply another layout, the one used on page 112 would be perfect.</p> <p>Page 85: May we kindly ask you to insert a space between the individual Morse code letters?</p> <p>Pages 117 and 118: May we kindly ask you for a re-formatting of the pages? We believe automation came to its limits.</p>
response	<p><i>Noted</i></p> <p>The comments on the definitions can only be considered in a future revision of the implementing rule itself, as this NPA was about the AMC/GM and not the IR. However, it should be noted that the definition of pilot-in-command does not say that the pilot-in-command would be the owner; the owner (or operator) is the one that nominates/designates the pilot-in-command.</p> <p>As for coordination with SPO, this is ongoing; however, it should be noted that the terms 'special' and 'specialised' operations cover different types of activities.</p> <p>In addition, it is important to mention that the SERA IR has already been adopted and the formatting issues have been resolved. The Regulation's reference is Commission Regulation (EU) No 923/2012.</p>
comment	<p><i>51</i> comment by: <i>CNES</i></p> <p>The Centre National d'Etudes Spatiales (CNES), as major unmanned free balloons operator, would like to make comments about Appendix 2.</p> <p>To this purpose, through a coordination process with the Direction Générale de</p>

response	<p>l'Aviation Civile (DGAC), comments have been prepared and will be/have been sent by DGAC.</p> <p>The motivation comes from the need to precise some requirements. Moreover suggestions have been made to make the requirements more fitted to the balloon activities.</p> <p>Should a working group being set up by EASA about unmanned free balloon, CNES would be available to participate.</p> <p><i>Noted</i></p> <p>The Agency would like to thank CNES for their comments.</p> <p>For the time being the Agency has not received the official request for a rulemaking task in this field. An official request could be made by the DGAC-FR through the appropriate channel (e.g. RAG/TAG). Once this official request is made, the Agency will encode it in the Rulemaking Programme, the rulemaking task will be initiated and the appropriate rulemaking group will be established following the Rulemaking Procedure.</p> <p>Since most of the proposals are addressing the IR or the need to develop completely new GM/AMC and not to amend the proposed ones in the NPA, the Agency considers that this should be done through a separate rulemaking task.</p>
comment	<p>67 comment by: <i>French Civil Aviation Authority (DGAC)</i></p> <p>The following comments have been prepared through a coordination process between DGAC and le Centre National d'Etudes Spatiales (French Space Agency, CNES), the major institutional french unmanned free balloons operator.</p> <p>They point out the need to precise the requirements or in some cases propose means to make them more fitted to the dedicated balloon activities, through the use of AMC or GM.</p> <p>Should a working group be set up by EASA about unmanned free balloons, CNES is available to participate.</p> <p>§1, c), 3) <i>"an area density of more than 13 g per square centimetre, determined by dividing the total mass in grams of the payload package by the area in square centimetres of its smallest surface; or"</i></p> <p>There should be a GM or AMC detailing what is considered to be the "smallest surface". Taking into account the various forms that can exist for the payload, the smallest surface may be undefined (corners, spherical surface, etc.).</p> <p>In applying this provision, we suggest that the surface to be considered should be the smallest of all the surfaces that are obtained when projecting the payload package on all flat surfaces.</p> <p>When designing the payload architecture, sharp appendixes should generally be avoided or else protected (penetration power)</p> <p>§1, c), 4) <i>"An impact force of 230 N"</i> is not physically rigourously defined. This can lead to various interpretations among stakeholders in applying this provision.</p> <p>In order to challenge this criterion, we propose to use static traction resistance tests.</p> <p>The suspension device can consist of multiple lines. In this case, it is suggested to consider that the test is performed on all lines considered together.</p> <p>§2.2 Light balloons used for meteorological purposes are those operated by organisations applying the specifications of the World Meteorological Organization (WMO), and released from places and at times agreed with the competent authorities.</p> <p>§2.5</p>

We have here an requirement to create no "hazard". It is a bit strong, and maybe a more relevant way to express the requirement would be, similarly to requirement SERA.3140 :

"An unmanned free balloon shall be operated in such a manner as to minimise hazards to persons, property or other aircraft..."

Indeed, it is impossible to create no risk at all when operating a balloon. We therefore understand §2.5 as "the risk is acceptable/not significant". Another way of saying this would be to establish clearly that a "hazard" corresponds to a level of risk which is not acceptable.

§3.3, a) et b)

"it is equipped with at least two payload flight-termination devices or systems, whether automatic or operated by telecommand, that operate independently of each other;"

Here the degree of independence between the two devices or systems should be specified.

The presence of two functional systems that totally operate independently one from the other, in a total system approach, from end to end, seems technically and financially unfeasible. It would imply that they have absolutely no common failure mode (yet attached to the same balloon) : if the same software is used in both systems, the development team should for example be different, or, going even further, the control room for the operator of the balloon should be duplicated.

For the interpretation of this requirement, we think it is reasonable to consider that the objective should be to approach, as close as possible, the single failure tolerance character. This can be achieved through segregation between the two devices, level of software quality, margins for the design of mechanical components, etc.

§3.5

The coloured pennants or streamers are very unlikely efficient as the relative velocity in the surrounding air is null; moreover they make the ground operations more difficult.

Here we suggest that the "force to break it" should be, as in §1, c), 4) estimated through the realisation of static traction resistance tests.

The term trailing antenna could be explained.

§3.6

A European shared specification of the lights referred here would be useful.

It is suggested that at least two lights are hung onto the flight train on both extremities in order to inform airspace users on the vertical extension of the aircraft; moreover a light code could be defined dedicated to balloon with a lateral avoidance rule.

On this matter, the CNES points out the fact that numerous lights will increase electricity consumption and also induce an augmentation of the whole mass of the balloon. This can be an issue, especially in the case of long duration Stratospheric Pressure Balloons operations. Indeed, the effects of the use of numerous lights might sharply shorten the flight duration.

§3.7

The coloured pennants or streamers are very unlikely efficient as the relative velocity in the surrounding air is null; moreover they make the ground operations more difficult and even endanger the operators for large usually used stratospheric balloons (200m long flight train, up to 1t payload mass).

We therefore suggest softening the requirement by specifying through an AMC or a GM that the parachutes and the gondolas hung onto the flight train can instead be conspicuously coloured.

response	<p><i>Noted</i></p> <p>The Agency would like to thank DGAC for their comments. For the time being the Agency has not received the official request for a rulemaking task in this field. An official request could be made by the DGAC-FR through the appropriate channel (e.g. RAG/TAG). Once this official request is made, the Agency will encode it in the Rulemaking Programme, the rulemaking task will be initiated and the appropriate rulemaking group will be established following the Rulemaking Procedure. Since most of the proposals are addressing the IR or the need to develop completely new GM/AMC and not to amend the proposed ones in the NPA, the Agency considers that this should be done through a separate rulemaking task.</p>
comment	<p>68 comment by: <i>René Meier, Europe Air Sports</i></p> <p>SERA.3115 (not actually part of the consultation...) deals with dropping and spraying. May we kindly ask the Agency to add GM with regards to dropping ballast from balloons and releasing water from sailplanes fitted with watertanks? Rationale We think a general permission to do so should be granted to balloon operators on the one hand, to sailplane pilots on the other as these two procedures are common ones.</p>
response	<p><i>Accepted</i></p> <p>A proposal has been developed in relation to the OPS-SPO rules to require authorisations only for the dropping of 'harmful substances'. At the time of writing this response the proposal is still in the comitology phase, therefore the final text is not known yet. Once the work on OPS-SPO is completed, the Agency could foresee a GM just making reference to the relevant material.</p>

A. Explanatory Note - I. General	p. 4-5
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comment	<p>8 comment by: <i>René Meier, Europe Air Sports</i></p> <p>Our question: Your "XXX/2012" is "923/2012"?</p>
response	<p><i>Accepted</i></p> <p>The reference to the SERA IR was not available at the time the NPA was signed off for the public consultation. The reference mentioned by you is correct.</p>

A. Explanatory Note - III. Comment response document	p. 5
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comment	<p>40 comment by: <i>UK CAA</i></p> <p>Page No: 5 Paragraph No: 10 Comment: Notwithstanding the statement that 'the CRD will be published simultaneously with the Agency's decision' in accordance with the EASA Rulemaking Procedure, will stakeholders be afforded the opportunity to submit comment on the CRD to EASA? Justification: Clarity on application of the rulemaking procedure.</p>
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response

Noted

Please note that according to Article 8 'Adoption and publication' of the new Rulemaking Procedure (<https://easa.europa.eu/management-board/docs/management-board-meetings/2012/01/EASA%20MB%20Decision%2001-2012%20Revised%20MB%20Decision%20RM%20Process%20.pdf>), CRDs will be published together with the Executive Director Decisions or Agency Opinions, so no reactions period is foreseen for the stakeholders. Taking into account the content and nature of this NPA, it has been decided to apply the new Rulemaking Procedure.

A. Explanatory Note - IV. Content of the draft Opinion/Decision

p. 6-12

comment

3

comment by: *Peter SCHMAUTZER*

During the study of the regulation and comparasion with the German translation, it turned out that there are important differences between English and German which gives a different meaning in German. In order to avoid in case of litigation an unclear outcome, I suggest that in case of differences between translations, the english version, which is obviously the original, prevails.

response

Noted

The inconsistencies should be notified to the Agency or to the European Commission in order to ensure correct translations. Therefore, the Agency would like to receive such information. If it is considered to be a translation error, then please refer to the English version. However, in most of the EU Member States' legal systems, the version in the national language is the legally binding one.

comment

6

comment by: *AENA*

GM1 Article 2(121): It derives from the ICAO Annex 2 **11** note to the same definition.
 AMC1 SERA.6001 (h): It derives from the content of the note to class F in Annex 11, ~~2.6~~ **2.6.1**.
 GM1 SERA.8010 (b): It derives from Annex 11, Note to ~~3.4~~ **3.4.1** b)
 GM1 SERA.2015 (d)(4): It derives from Annex 11, Note to ~~3.7.1~~ **3.7.1.1** d)
 GM1 SERA.2015 (d)(5): It derives from Annex 11, Note to ~~3.7.1~~ **3.7.1.1** e)
 GM1 to APP.2 (3.3.b): It derives from ICAO Annex 2, Notes to Appendix ~~3~~ **4** (in case of amdt. 42) or **5** (in case of amdt. 43)

response

Noted

The Agency understands that these comments are relevant to the Explanatory Note, not to the content of the proposed AMC/GM and, therefore, no changes on those are being proposed. The Agency would like to apologise for the fact that some typos in the references created additional workload for the review.

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 2(39)

p. 14

comment

12

comment by: *EUROCOPTER*

response	<p>QNH definition is missing. Although well-known by the aeronautic community, a definition of QNH should be introduced.</p> <p><i>Not accepted</i></p> <p>QNH is already included in the GM to the definition for altitude as is QFE in the GM to the definition for height. Therefore, it is considered that there is no need to include additional definitions.</p>
comment	<p>41 comment by: UK CAA</p> <p>Page No: 14 Paragraph No: GM1 Article 2(39) Altitude Comment: Refine text Justification: The proposed guidance material for Article 2(78) Flight Level provides explanations of what the terms 'altitude' and 'height' mean; it is considered inappropriate for such information to appear there, rather it should appear under Article 2(39) Altitude and against the proposed guidance material for Article 2(84) Height. Proposed Text: <u>GM1 Article 2(39) Altitude</u> (a) A pressure type altimeter calibrated in accordance with the Standard Atmosphere when set to a QNH altimeter setting will indicate altitude (above the mean sea level). (b) The term 'altitude' indicates altimetric rather than geometric altitude.</p>
response	<p><i>Accepted</i></p> <p>Text has been amended.</p>

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 2(45)

p. 15

comment	<p>13 comment by: EUROCOPTER</p> <p><u>Major comment:</u> this definition is not in accordance with ICAO PBN Manual (document 9113). Performance Based Navigation (PBN) includes RNAV and Required Navigation Performance (RNP) navigation. It is wrong to say that RNAV includes PBN.</p>
response	<p><i>Not accepted</i></p> <p>This GM comes from the note to the definition of RNAV in ICAO Annex 2 and the same note has been kept in the 2012 issue of the PBN Manual (ICAO Doc 9613) to the same definition of RNAV. The GM is, therefore, considered to be aligned with the PBN Manual.</p>

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 2(46)

p. 15

comment	<p>31 comment by: Spanish Air Force Staff</p> <p>The "competent authority" functions should be described at regulation level; AMC and/or GM are not the proper place to identified new responsibilities for this</p>
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	authority. For this reason, the sentence ",as determined by the competent authority," should be deleted form this GM.
response	<p><i>Not accepted</i></p> <p>The proposed AMC and GM do not create nor introduce new obligations. When a requirement for the competent authority (or any other entity) appears in the text of a proposed AMC or GM, it is only as a reference or reminder, and serves as a link to the requirements already described in the relevant regulations.</p>

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 2(58)

p. 15

comment	<p>1 comment by: <i>George Knight</i></p> <p>A grey area perhaps but are not ATZs that are in Class G airspace Controlled Airspace when controlled by an ATCO using the call sign TOWER?</p>
response	<p><i>Noted</i></p> <p>An ATZ in Class G airspace is not 'controlled airspace'. In Class G airspace an ATS unit serving an aerodrome would normally be AFIS, which should also be indicated in the R/T. An ATC unit using the call sign 'tower' does not necessarily imply the existence of a control zone (controlled airspace).</p>

comment	<p>17 comment by: <i>ENAV</i></p> <p>GM1 Article 2(58) Controlled airspace Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E. ANNEX 2: <i>Note.— Controlled airspace is a generic term which covers ATS airspace Classes A, B, C, D and E as described in Annex 11, 2.6.</i> <i>Class E.</i> IFR and VFR flights are permitted, IFR flights are provided with air traffic control service and are separated from other IFR flights. All flights receive traffic information as far as is practical. Class E shall not be used for control zones. By disregarding the last part of the ICAO note (reference to Annex 11), the proposed GM may become improperly extensive. Class E is controlled airspace only for IFR flights.</p>
response	<p><i>Not accepted</i></p> <p>In ICAO it was necessary to make this note extensive because the airspace classification was in another Annex. In the case of SERA, the provisions are in the same regulation and, therefore, there is no need to make any further references.</p>

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 2(78)

p. 15

comment	<p>14 comment by: <i>EUROCOPTER</i></p> <p>As for QNH, a definition of QFE is missing.</p>
response	<p><i>Not accepted</i></p>

QNH is already included in the GM to the definition for altitude as is QFE in the GM to the definition for height. Therefore, it is considered that there is no need to include additional definitions.

comment 32 comment by: Spanish Air Force Staff

In this GM there is a definition for "flight level", "height" and "altitude" under the title "Flight level". This is confusing because somebody can interpret that both "height" and "altitude" are different type of "Flight level". The proposal is to change the title of the GM with one that will cover the three definitions, for example: "Altimeter settings" or to have three different GMs.

response *Accepted*

The references in (a)(1) and (2) have been deleted because they are covered in the GM to definitions 39 and 84. Point (b) is moved now under 'altitude' and 'height' respectively (please see response to comment 41 above).

comment 42 comment by: UK CAA

Page No: 15

Paragraph No: GM1 Article 2(78) Flight Level

Comment: Delete (a)(1) & (2) and (b)

Justification: The guidance material for Article 2(39) Altitude & 2(84) Height already provide explanations as to what QFE and QNH settings indicate. Reference to that information is, in the case of Article 2(78) Flight Level, irrelevant regardless of what is stated in the source ICAO material. It is not necessary to repeat it here and refined text is proposed.

Proposed Text:

GM1 Article 2(78) Flight level

A pressure type altimeter calibrated in accordance with the Standard Atmosphere when set to a pressure of 1 013.2 hPa, may be used to indicate flight levels.

response *Accepted*

The references in (a)(1) and (2) have been deleted because they are covered in the GM to definitions 39 and 84. Point (b) is moved now under 'altitude' and 'height' respectively (please see response to comment 41 above).

comment 58 comment by: HungaroControl

It is confusing that points (1) and (2) are located under the title 'Flight level' because Flight level is unequivocally based on 1013.2 hPa setting.

response *Accepted*

The references in (a)(1) and (2) have been deleted because they are covered in the GM to definitions 39 and 84. Point (b) is moved now under 'altitude' and 'height' respectively (please see response to comment 41 above).

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 2(84)

p. 15

comment 15 comment by: EUROCOPTER

response	<p>A definition of QFE is missing.</p> <p><i>Not accepted</i></p> <p>QNH is already included in the GM to the definition for altitude as is QFE in the GM to the definition for height. Therefore, it is considered that there is no need to include additional definitions.</p>
comment	<p>43 comment by: UK CAA</p> <p>Page No: 15 Paragraph No: GM1 Article 2(84) Height Comment: Refine text Justification: The proposed guidance material for Article 2(78) Flight Level provides explanations of what the terms 'altitude' and 'height' mean; it is considered inappropriate for such information to appear there, rather it should appear under Article 2(84) and against the proposed guidance material for Article 2(39) Altitude. Proposed Text: <u>GM1 Article 2(84) Height</u> (a) A pressure type altimeter calibrated in accordance with the Standard Atmosphere when set to a QFE altimeter setting, will indicate height (above the QFE reference datum). (b) The term 'height' indicates altimetric rather than geometric height.</p>
response	<p><i>Accepted</i></p> <p>Text amended.</p>

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 2(97)

p. 16

comment	<p>39 comment by: Ingmar Hedblom</p> <p>Proposed GM1 Article 2(97) reads: To enable practical application of the definition of night, evening and morning civil twilight may be promulgated pertinent to the date and position. The associated definition in draft SERA regulation is: 'night' means the hours between the end of evening civil twilight and the beginning of morning civil twilight. Civil twilight ends in the evening when the centre of the sun's disc is 6 degrees below the horizon and begins in the morning when the centre of the sun's disc is 6 degrees below the horizon; This definition is not consistent with the agreed definitions in the air crew regulation 1178-2011 which also is included in the opinion regarding flight operations 04-2011 which reads 'Night' means the period between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise as may be prescribed by the appropriate authority, as defined by the Member State. There should be the same definitions of night otherwise it will cause confusion</p>
response	<p><i>Noted</i></p> <p>The Agency is aware of the differences between the wordings of the two definitions. However, it is important to note that the actual definition is the same in FCL, OPS and SERA; except that SERA also explains what 'civil twilight' means. Furthermore, older FCL and OPS definitions still allow for national differences, but</p>

alignment will be undertaken in the next convenient opportunity.
In addition, it is important to highlight that the comment seems to be made to the IR rather than to the AMC/GM and, therefore, it is considered out of the scope of this NPA.

comment 64 comment by: EFLEVA

GM1 Article 2(97) Night.

The definition of Night as noted on Page 39 of Attachment 1, differs from the definition as used in the FCL and OPS Rules.

EFLEVA previously pointed out a difference between FCL and OPS when responding to NPA 2009-02b.

EFLEVA suggests that for the sake of consistency the definition now used in FCL and OPS should be used in the ATC regulation.

response *Not accepted*

The Agency is aware of the differences between the wordings of the two definitions. However, it is important to note that the actual definition is the same in FCL, OPS and SERA; except that SERA also explains what 'civil twilight' means. Furthermore, older FCL and OPS definitions still allow for national differences, but alignment will be undertaken in the next convenient opportunity.

In addition, it is important to highlight that the comment seems to be made to the IR rather than to the AMC/GM and, therefore, it is considered out of the scope of this NPA.

comment 82 comment by: K Franzen

Part-FCL and Part-OPS has a different definition of "night". This is consistent with the definition set out in ICAO Annex 2. I find it impossible to operate with different definitions in EU regulations and of this election the ICAO definition must be used.

response *Not accepted*

The Agency is aware of the differences between the wordings of the two definitions. However, it is important to note that the actual definition is the same in FCL, OPS and SERA; except that SERA also explains what 'civil twilight' means. Furthermore, older FCL and OPS definitions still allow for national differences, but alignment will be undertaken at the next convenient opportunity.

In addition, it is important to highlight that the comment seems to be made to the IR rather than to the AMC/GM and, therefore, it is considered out of the scope of this NPA.

comment 83 comment by: K Franzen

In order not to unnecessarily - with no technical reason (flight visibility good / daylight) - limit the possibilities to fly VFR, or in some cases not be able to fly at all (e.g. when rules added to the aircraft / type /category of aircraft only allows flying under formal day) possibilities must be maintained to allow a national definition of "night" in the higher latitudes.

response *Not accepted*

The Agency is aware of the differences between the wordings of the two

definitions. However, it is important to note that the actual definition is the same in FCL, OPS and SERA; except that SERA also explains what 'civil twilight' means. Furthermore, older FCL and OPS definitions still allow for national differences, but alignment will be undertaken at the next convenient opportunity. In addition, it is important to highlight that the comment seems to be made to the IR rather than to the AMC/GM and, therefore, it is considered out of the scope of this NPA.

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 2(114)

p. 16

comment 44

comment by: UK CAA

Page No: 16**Paragraph No:** GM1 Article 2(114) Runway-holding position**Comment:** GM is also required to make clear that aircraft cannot get authorisation from an aerodrome control tower if it does not have ATC.**Justification:** Clarity of application of the Implementing Rule.**Proposed Text:** Add:**GM2 Article 2 (114) Runway-holding position**

Runway holding positions also exist at aerodromes without ATC, and therefore in such circumstances authorisation is not possible from an aerodrome control tower.

response *Accepted*

Text amended.

B. Draft Rules - I. Draft Part-SERA - Annex to AMC/GM to Cover Regulation - GM1 Article 4

p. 16-17

comment 9

comment by: René Meier, Europe Air Sports

Being heavily involved in Part-SPO it is difficult for our community to understand the meaning of GM1 Article 4.

Rationale:

We do not know what Part-SPO and its provisions will look like. In our view it is therefore too early to accept draft texts dealing with special operations to avoid future misunderstandings and inconsistencies.

response *Noted*

It should be noted that the coverage of the terms 'special operations' (SERA) and 'specialised operations' (SPO) is not the same. Efforts are underway to ensure that the final version of SPO does not contradict the SERA Regulation.

comment 16

comment by: EUROCOPTER

OAT is the official international acronym for Outside Air Temperature. Another acronym should be used to designate Operational Air Traffic, for example OPAT.

response *Not accepted*

The acronym OAT (Operational Air Traffic) is spelled out in the GM to Article 4,

and, as used in SERA, there should not be any misunderstandings in the context of this rule.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 2 Applicability and Compliance - GM1 SERA.2005(b)

p. 18

comment 33 comment by: *Spanish Air Force Staff*

The "competent authority" functions should be described at regulation level; AMC and/or GM are not the proper place to identified new responsibilities for this authority. For this reason, the sentence "by the competent authority," should be deleted form this GM.

response *Not accepted*

The proposed AMC and GM do not create nor introduce new obligations. When a requirement for the competent authority (or any other entity) appears in the text of a proposed AMC or GM, it is only as a reference or reminder, and serves as a link to requirements already described in the relevant regulations.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 3 - General Rules and collision avoidance - GM1 SERA.3105

p. 18

comment 18 comment by: *ENAV*

GM1 SERA.3105 Minimum Heights

MINIMUM HEIGHTS ESTABLISHED BY THE COMPETENT AUTHORITY ABOVE THE REQUIRED MINIMUM HEIGHTS

In cases where it is considered that the minimum heights specified in SERA.5005(f) and SERA.5015(b) are not sufficient, the competent authority may establish appropriate structures, such as controlled, restricted or prohibited airspace.

Controlled airspace should not be seen as a means to ensure usage of higher minimum heights.

response *Noted*

Controlled airspace provides the means for ATC to assign levels above the minimum heights defined in SERA. This is not understood as a contradiction to SERA but more as a clarification of the different possibilities.

comment 34 comment by: *Spanish Air Force Staff*

It is not clear the meaning of "controlled airspace" in this context. Please, clarify. Regarding "restricted and prohibited airspace", the objectives of this structures are different from the one proposed in this GM.

According to Eurocontrol ASM Handbook:

- A prohibited area is an airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.
- A restricted area is an airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is

	<p>restricted in accordance with specific conditions.</p> <p>Therefore, the appropriate structures, if needed, should be different. "restricted and prohibited airspace" should be deleted.</p>
response	<p><i>Noted</i></p> <p>Controlled airspace provides the means for ATC to assign levels above the minimum heights defined in SERA. This is not understood as a contradiction to SERA but more as a clarification of the different possibilities.</p> <p>The purpose and objective of establishing a prohibited or restricted airspace by a Member State is not affected by this GM. This GM only clarifies that, when deciding to do so, the Member State decides which rules should be applicable in these portions of airspace including the establishment of minimum heights.</p>
comment	<p>69 comment by: <i>French Civil Aviation Authority (DGAC)</i></p> <p>With reference to item 5 of the minutes of the 45th meeting of the Single Sky Committee, the Commission agreed on the principle that: <i>"SERA 3105 does not prevent a Member State to keep national arrangements setting minimal heights above cities higher than those in paragraph SERA.5005 (f) and SERA.5015 (b), without prejudice to specific regulated airspace areas...The future AMC/GM shall confirm this."</i></p> <p>As agreed during SSC45, France wishes to unambiguously preserve its Ministerial Order relating to the minimum height over cities. This Order sets minimum heights for the flight over cities, depending on the width span of the settlement. The proposed GM on this matter is not satisfactory since it seems to allow member states to impose minimum heights over congested areas <u>only through</u> the use of airspace structures.</p> <p>This will undoubtedly induce difficulties for practical reasons. Indeed, the use of airspace structures implies the creation of restricted areas over every large settlement. This means hundreds of structures to create and as many local consultations on the highly sensitive political issue of noise impact. Furthermore, the representation of these areas on aeronautical charts will inevitably lead to deteriorate the readability of the charts which is not acceptable for airspace users. In this context, France requires the proposed GM1 for SERA.3105 to be written as follows:</p> <p>"GM1 SERA.3105 Minimum heights MINIMUM HEIGHTS ESTABLISHED BY THE COMPETENT AUTHORITY ABOVE THE REQUIRED MINIMUM HEIGHTS <i>In cases where it is considered that the minimum heights specified in SERA.5005 and SERA.5015 are not sufficient, the competent authority may establish appropriate structures, such as controlled, restricted or prohibited airspace, or define specific conditions through national arrangements.. In both cases, the related Aeronautical Information Publication (AIP) and charts should be made easy to comprehend for the airspace users ."</i></p> <p>With this new redaction, the GM would comply with the principle agreed by the Commission as mentioned above.</p>
response	<p><i>Partially accepted</i></p> <p>The envisaged GM can only be compliant with the text of the rule. It is believed that an adaptation of the proposal can be acceptable if reading: <i>In cases where it is considered that the minimum heights specified in SERA.5005 and SERA.5015 are not sufficient, the competent authority may establish appropriate structures, such as controlled, restricted or prohibited airspace, and</i></p>

define specific conditions through national arrangements. In all cases, the related Aeronautical Information Publication (AIP) and charts should be made easy to comprehend for airspace users.

comment 75 comment by: *European Sailplane Manufacturers*

The European sailplane manufacturer have a comment regarding the rules covering „minimum heights“ as specified in SERA.3105.
The proposed rule that the specified minimum heights may be modified by the competent authority of the regarding member state is – in our opinion – not enough.
Our case is flight with sailplanes in mountainous terrain, where the lift generated by wind across mountains is used by sailplanes and other types of aircraft (e.g. hang gliders, paragliders, etc.).
This so called ridge soaring does occur below the minimum heights and needs therefore much lower minimum heights.
Of course with the proposed rules and AMC it is possible, that member states (i.e. the regarding competent authorities) will permit such operations, but without at least a clear description in the AMC it will probably occur, that these rules will not be standardized across Europe.
Even worse, it might be happening, that in some member state such a permit is forgotten or applied in a way which will preclude ridge soaring which would be a large problem for sailplanes being operated there.
Therefore we herewith demand that regarding AMC material will be included into the AMC and that ideally the SERA regulation itself will receive according wording.

response *Not accepted*

AMC1 SERA.5005(f) proposed in the NPA mentions that the competent authorities should specify the conditions for aircraft executing ridge or hill soaring.
This provision is considered to be sufficient to address the concern expressed.

**B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air -
Section 3 - General Rules and collision avoidance - GM2 SERA.3105**

p. 18

comment 35 comment by: *Spanish Air Force Staff*

The "competent authority" functions should be described at regulation level; AMC and/or GM are not the proper place to identified new responsibilities for this authority. For this reason, the sentence "The competent authority is responsible for" should be deleted form this GM.

response *Not accepted*

The proposed AMC and GM do not create nor introduce new obligations. When a requirement for the competent authority (or any other entity) appears in the text of a proposed AMC or GM, it is only as a reference or reminder, and serves as a link to the requirements already described in the relevant regulations.

comment 45 comment by: *UK CAA*

Page No: 18
Paragraph No: GM2 SERA.3105 Minimum Heights
Comment: This provision is strongly supported by the UK CAA. However, it is stated that the competent authority is responsible for ensuring that the resulting

level of safety is acceptable. This needs to be restricted to the resultant level of safety from the variance from the normal minimum level, and not for the subsequent conduct of the flight.

Justification: It is very important that States have the flexibility to permit low flying on both a routine/regular basis and on a one off basis for legitimate purposes. However, clarity of safety responsibility is essential.

Proposed Text: Change to read:

GM2 SERA.3105

MINIMUM HEIGHTS PERMITTED BY THE COMPETENT AUTHORITY BELOW THE REQUIRED MINIMUM HEIGHTS

The permission from the competent authority to fly at lower levels than those stipulated in SERA.5005(f) and SERA.5015(b) may **be permitted for an** unlimited number of cases or for a specific flight upon specific request. The competent authority is responsible for ensuring that the level of safety **resulting from such permissions is acceptable.**

response *Partially accepted*

The text of GM2 to SERA.3105 will be amended to reflect the provided proposal with a minor amendment ('... and SERA.5015 (b) may be granted for ...').

comment 70 comment by: *French Civil Aviation Authority (DGAC)*

This GM is itself fully satisfactory since it is pursuant to the agreement formulated by the Commission during the 45th meeting of the Single Sky Committee: "*Member States may continue to impose specific operating conditions on the use of airspace by the unmanned aircraft, in addition to the possibility to allow them flying under the minimal heights. The future AMC/GM shall confirm this.*"

However, further clarification may be needed on GM1 SERA.5005 (f) in order to confirm the understanding of GM2 SERA.3105 (*see comments on GM1 SERA.5005 (f) below*).

response *Noted*

The point will be addressed with the comments to GM1 SERA.5005(f).

comment 84 comment by: *K Franzen*

I think that the last sentence of this GM is impossible to comply with for the authority. Responsibility for "... the resulting level of safety ..." must be placed on the operator. In any case, this last sentence must be reworded!

response *Accepted*

The GM is amended as explained in the Agency's response to comment 45.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 3 - General Rules and collision avoidance - GM1 SERA.3201

p. 18

comment 65 comment by: *EFLEVA*

GM1 SERA.3201 General, Vigilance on board an aircraft.

It is the view of EFLEVA that whilst this GM may be well motivated it should belong in the Operating Rules

response	<p><i>Not accepted</i></p> <p>This GM is based on Note 1 to paragraph 3.2 of ICAO Annex 2 which is transposed in SERA.3201 and, therefore, it should complement this paragraph. Although similar pilot-in-command responsibilities exist in the Air Operations Regulation, it is important to keep this GM to SERA.3201 to further explain the intent of the IR. The Agency will evaluate whether similar GM would be necessary to the relevant requirements for air operations.</p>
comment	<p>66 comment by: <i>Uppvinden AB</i></p> <p>In order to highlight possibilities to prevent collisions it should be noted that not only aircraft, but also parachutists have to confirm with the VMC rules regarding distance to clouds. Argument: Especially during free fall it can be dangerous if the parachutists operate close to clouds. With normal VFR rules connected to the operations it can be enough time to observe them and prevent a collision.</p>
response	<p><i>Not accepted</i></p> <p>SERA does not apply to parachutists. Although it is recognised that parachutists should be aware of the risks associated with their activities in order to prevent collision with aircraft, a GM related to activities for which the rule is not applicable is not possible. There are, however, certain rules in SERA and in the requirements for aircraft operations that are aiming to mitigate the risk of collision.</p>
comment	<p>73 comment by: <i>French Civil Aviation Authority (DGAC)</i></p> <p>The "See and avoid" principle is generally considered as an important part of the rules of the air. We believe a GM is not strong enough to require to "see and avoid". A <u>means</u> to implement the general requirement "take action as will best avert collision" is to maintain permanent vigilance on board the aircraft. As long as there is no other equivalent or better means (i.e., in fact, no other AMC) to avert collisions with other aircraft - potentially with no transponder and no radio, i.e. non-cooperative aircraft -, the pilot should do his best to "see and avoid". Maybe one day this vigilance will be automated (opto-electronic detection, on-board primary radar detection, etc.). In this case others AMC could exist. In conclusion, we think this GM should be upgraded to an AMC (and adapted).</p>
response	<p><i>Not accepted</i></p> <p>The potential added value of an AMC compared to the existing rule is not understood. Additionally, vigilance is an element which is not measurable and subsequently not appropriate for AMC in the present case.</p>

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 3 - General Rules and collision avoidance - GM1 SERA.3210(d)(4)(ii)

p. 18-19

comment	<p>19 comment by: <i>ENAV</i></p> <p>GM1 SERA.3210(d)(4)(ii)(B) Right-of-way CONTROL OF PERSONS AND VEHICLES AT AERODROMES In prescribing the minimum separation between vehicles and taxiing aircraft the availability of lighting, signals and signage should normally be taken into account.</p>
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	Have markings been voluntarily neglected due to the low visibility scenario? If so, that may be explicitly mentioned.	
response	Accepted The GM is amended.	
comment	46	comment by: UK CAA
	<p>Page No: 18</p> <p>Paragraph No: GM1 SERA.3210(d)(4)(ii) Right-of-way</p> <p>Comment: There is a need for GM to also make clear the duties of pilots and tug operators with regard to collision avoidance regardless of ATC clearance. This is known and identified as a result of accident investigation findings in the UK.</p> <p>Justification: Clarity of responsibilities.</p> <p>Proposed Text: Add additional paragraphs (a) and (b):</p> <p><u>GM2 SERA.3210(d)(4)(ii) Right of way</u></p> <p>CONTROL OF PERSONS AND VEHICLES AT AERODROMES:</p> <p>(a) Notwithstanding any air traffic control clearance it is the duty of the commander of a flying machine to take all possible measures to ensure that his flying machine does not collide with any other aircraft or vehicle or with any obstacle.</p> <p>(b) Where a flying machine is being towed on the ground and the commander of the flying machine is not on board, then notwithstanding any air traffic control clearance it is the duty of the person in charge of the vehicle towing the flying machine to take all possible measures to ensure that the aircraft does not collide with any other aircraft or vehicle or with any obstacle.</p>	
response	Not accepted Although the Agency fully agrees with the intent of the proposal, it is considered to be sufficiently covered in SERA.3201, 3210(d)(4)(iv). Therefore, there is no need to add additional GM.	
comment	76	comment by: European Sailplane Manufacturers
	<p>Additionally to the comment already given regarding "minimum heights versus ridge soaring" also the rules covering collision avoidance as specified in SERA.3210 need amendment for this type of sailplane operation.</p> <p>Of course the rule that opposing traffic has to give way by turning to the right side needs clarification when flying at a ridge. Here the aircraft (sailplane, hang glider, etc.) flying with the right wing towards the ridge has to have the right of way as it cannot turn to the right (because of the high terrain).</p> <p>Additionally we propose introduction of clear rules regarding overtaking other aircraft when flying on the ridge. Such rules are needed due to the speed difference of the according aircraft typically using lift near a ridge (e.g. relative fast sailplane versus rather slow paraglider).</p> <p>Again this should be at least specified in the AMC material or better direct in the SERA rules.</p>	
response	Noted As regards 'overtaking', this is already covered in SERA.3210 (c)(3)(i).	

comment	<p>47</p> <p style="text-align: right;">comment by: UK CAA</p> <p>Page No: 19 Paragraph No: GM1 SERA.3220(b) Simulated Instrument Flights Comment: Alternative GM text proposed. Justification: The draft GM text effectively repeats the SERA.3220 Rule. This is not necessary or useful. Furthermore the term 'control seat' is used but not defined (neither is it defined by ICAO). Proposed Text: Change to read: <u>GM1 SERA.3220(b) Simulated Instrument Flights</u> SAFETY PILOT (a) For the purposes of this rule a safety pilot is a pilot that holds a licence which entitles them to act as pilot in command of the aircraft and is able and prepared to take control of the aircraft at any time during the flight. The safety pilot is responsible for maintaining lookout and avoiding collisions on behalf of the person flying under simulated instrument conditions. (b) A control seat is one which affords the person sitting in the seat sufficient access to the flying controls so as to enable them to fly the aircraft unimpeded.</p>
response	<p><i>Partially accepted</i></p> <p>The text of the new proposed GM has been used for revising the GM, but few amendments have been made to better reflect the intent.</p>

**B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air -
Section 4 Flight Plans - M1 SERA.4001**

p. 19-20

comment	<p>72</p> <p style="text-align: right;">comment by: French Civil Aviation Authority (DGAC)</p> <p>The expression "vicinity of an aerodrome" occurs many times in the text with different possible meanings/interpretations according to the situation. Thus, it seems to be difficult to find a global definition relevant to all situations. However in some cases, this may be clarified, to some extent.</p> <p>For instance, it is required under SERA 4001(b)(6) that a flight plan shall be submitted prior to operating any flight planned to operate at night, if leaving the vicinity of an aerodrome.</p> <p>In the case of a VFR flight at night operating between two aerodromes, we consider that the flight could be deemed to be operated in the vicinity of the two aerodromes, provided that a continuous two-way air-ground voice communication is established with a single ATS unit during the cruising portion of the flight.</p> <p>In this context, we estimate that it is reasonable to alleviate the flight from submitting a flight plan since the relevant elements of the flight could be transmitted by radiotelephony to the ATS unit concerned, which is compliant with SERA.4001 (c).</p>
response	<p><i>Noted</i></p> <p>The agreed implementing rule is specific and cannot be modified by any GM or AMC as proposed. According to your proposal, a night VFR may not fill in an FPL, even when leaving CTRs, if a continuous two-way air-ground voice communication is established with a single ATS unit. This would be in contradiction to the SERA IR.</p>

**B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air -
Section 4 Flight Plans - GM1 SERA.4005(a)**

p. 20

comment	52	comment by: <i>Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)</i>
		On the basis of SERA IR - 10001 (Alerting Service) - we find it essential that GM 1 SERA 4005 (a) (Abbreviated FPL) contain also information on "Persons on Board". The rationale behind this is the mere nature of alerting service and for ATS to have available the number of persons on board in case of aircraft crashing, ditching etc.
response		<i>Partially accepted</i>
		The GM proposed in the NPA indicates some elements 'as a minimum'. Other elements may be selected from the list of SERA.4005(a) as considered relevant by the competent authority. The GM has been, therefore, amended to clarify the intent.
comment	60	comment by: <i>Danish Transport Authority</i>
		On the basis of SERA IR - 10001 (Alerting Service) - we find it essential that GM 1 SERA 4005 (a) (Abbreviated FPL) contain also information on "Persons on Board". The rationale behind this is the mere nature of alerting service and for ATS to have available the number of persons on board in case of aircraft crashing, ditching etc.
response		<i>Partially accepted</i>
		The GM proposed in the NPA indicates some elements 'as a minimum'. Other elements may be selected from the list of SERA.4005(a) as considered relevant by the competent authority. The GM has been, therefore, amended to clarify the intent.

**B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air -
Section 5 Visual Meteorological Conditions ...- AMC1 SERA.5005(f)**

p. 20

comment	36	comment by: <i>Spanish Air Force Staff</i>
		The "competent authority" functions should be described at regulation level; AMC and/or GM are not the proper place to identified new responsibilities for this authority. For this reason, the sentence "The competent authority" should be deleted form this AMC.
response		<i>Not accepted</i>
		The proposed AMC and GM do not create nor introduce new obligations. When a requirement for the competent authority (or any other entity) appears in the text of a proposed AMC or GM, it is only as a reference or reminder, and serves as a link to the requirements already described in the relevant regulations.
comment	74	comment by: <i>French Civil Aviation Authority (DGAC)</i>
		It seems that the text should probably be read: "The competent authorities should specify the conditions under which the permission is granted or may be

	granted , including the minimum heights above the terrain, water or the highest obstacle within a radius of 150 m (500 ft) from an aircraft practising forced landings, a balloon or an aircraft executing ridge or hill soaring."
response	<i>Accepted</i> The AMC has been amended to reflect the intent.
comment	81 comment by: <i>K Franzen</i> Suggest that of ICAO Annex 2 different and newly introduced rule on a radius of 150 meters from the aircraft to be removed. This rule makes it impossible to conduct ridge flying and difficult to fly in valleys.
response	<i>Not accepted</i> Ridge soaring is specifically mentioned in AMC1 SERA.5005(f) and, therefore, there is no need to further specify it here.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 5 Visual Meteorological Conditions ...- GM1 SERA.5005(f)

p. 20

comment	37 comment by: <i>Spanish Air Force Staff</i> The "competent authority" functions should be described at regulation level; AMC and/or GM are not the proper place to identified new responsibilities for this authority. For this reason, the sentence ",permission from the competent authority," should be deleted form this GM.
response	<i>Not accepted</i> The proposed AMC and GM do not create nor introduce new obligations. When a requirement for the competent authority (or any other entity) appears in the text of a proposed AMC or GM, it is only as a reference or reminder, and serves as a link to the requirements already described in the relevant regulations.
comment	71 comment by: <i>French Civil Aviation Authority (DGAC)</i> France understands that the fourth sentence (d) of the GM may cover the case of an RPA used for aerial work but not the case of a model aircraft. Thus the proposed GM does not fully reflect the principle established by the Commission during SSC 45 : <i>'Member States may continue to impose specific operating conditions on the use of airspace by the unmanned aircraft, in addition to the possibility to allow them flying under the minimal heights.'</i> Consequently, and following the item 5 of the minutes of the 45 th meeting of the Single Sky Committee, France requires the following words to be added to the current redaction of the proposed GM: <i>'Member States may continue to impose specific operating conditions on the use of airspace by the unmanned aircraft, in addition to the possibility to allow them flying under the minimal heights.'</i>
response	<i>Noted</i> NPA 2012-10 on 'Transposition of Amendment 43 to Annex 2 to the Chicago Convention on remotely piloted aircraft systems (RPASs) into common rules of the

air' already proposed a way to include RPAS within SERA. The comments on this NPA are currently under review and the rule will be amended. As proposed in this NPA, and as agreed at review group level, the specific conditions on the use of airspace by RPAS is being regulated by the relevant articles and appendix proposed by that NPA, whose content has been amended taking into account the review of the comments and the outcome of the review group discussions.

comment	79	comment by: K Franzen
	Suggests that "Flying displays" are added to the list.	
response	<i>Not accepted</i>	
	Flying displays are covered by GM1 SERA.5005(f)(d).	

comment	80	comment by: K Franzen
	Proposes that it clarifies that permissions from SERA.5005 (f) do not fall under Article 4	
response	<i>Noted</i>	
	Article 4 covers special exemption possibilities for a small subset of operations that could be granted to entities for the specific activities provided within that article which are of public interest and for training. These activities are of different nature than other specific options offered in SERA. The embedded flexibility existing in SERA does not constitute an exemption and should not be considered as such.	

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 5 Visual Meteorological Conditions ...- AMC1 SERA.5010(a)(3)

p. 20-21

comment	53	comment by: Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)
	Discrepancies exist between the AMC1 5010 (a)(3) and GM 1 5010 (a)(3) compared to the Regulation text in SERA.5010, and hence the material is not consistent. In "Speed limit to be applied by helicopters' pilots", the term "or more" is supposed to read "or less". Besides this, the Visibility-values in the table in GM 1 5010 (a)(3) are not consistent with the text.	
response	<i>Not accepted</i>	
	The AMC relates to the speed limits for visibilities below 1 500 m as may be the case for helicopters. However, the table provides GM on a much more conservative approach for helicopters. The term 'or more' in the GM indicates the range of applicability of the 140 kt speed limitation which is between 1 500 m and 5 000 m and is, therefore, considered to be correct.	

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 5 Visual Meteorological Conditions ...- GM1 SERA.5010(a)(3)

p. 21

comment	54	comment by: Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)
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	Discrepancies exist between the AMC1 5010 (a)(3) and GM 1 5010 (a)(3) compared to the Regulation text in SERA.5010, and hence the material is not consistent. In "Speed limit to be applied by helicopters' pilots", the term "or more" is supposed to read "or less". Besides this, the vVisibility-values in the table in GM 1 5010 (a)(3) are not consistent with the text.
response	<p><i>Not accepted</i></p> <p>The AMC relates to the speed limits for visibilities below 1 500 m as may be the case for helicopters. However, the table provides GM on a much more conservative approach for helicopters. The term 'or more' in the GM indicates the range of applicability of the 140 kt speed limitation which is between 1 500 m and 5 000 m and is, therefore, considered to be correct.</p>
comment	<p>59 comment by: Danish Transport Authority</p> <p>Discrepancies exist between the AMC1 5010 (a)(3) and GM 1 5010 (a)(3) compared to the Regulation text in SERA.5010, and hence the material is not consistent. In "Speed limit to be applied by helicopters' pilots", the term "or more" is supposed to read "or less". Besides this, the Visibility-values in the table in GM 1 5010 (a)(3) are not consistent with the text.</p>
response	<p><i>Not accepted</i></p> <p>The AMC relates to the speed limits for visibilities below 1 500 m as may be the case for helicopters. However, the table provides GM on a much more conservative approach for helicopters. The term 'or more' in the GM indicates the range of applicability of the 140 kt speed limitation which is between 1 500 m and 5 000 m and is, therefore, considered to be correct.</p>

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 5 Visual Meteorological Conditions ...- GM1 SERA.5025(a)

p. 21

comment	<p>20 comment by: ENAV</p> <p>GM1 SERA.5025(a) IFR - Rules Applicable to IFR Flights Outside Controlled Airspace CRUISING LEVELS</p> <p>Although an IFR flight operating in level cruising flight outside controlled airspace is to be flown at a cruising level appropriate to its track as specified in the table of cruising levels, this does not preclude the use of cruise climb techniques.</p> <p>Clarification is needed about the basis on which the ICAO scope would be generalized. ICAO reference to supersonic flights limits the provision to very few cases, and in connection with specific technical needs.</p>
response	<p><i>Not accepted</i></p> <p>Cruise climb techniques are used by aircraft for other than supersonic flights. Although supersonic flights are mentioned specifically in ICAO Annex 2 the note in paragraph 5.3.1, Annex 2, paragraph 5.2.2, considers that the cruise climb technique can also be used in uncontrolled airspace, not only by supersonic flights.</p>
comment	<p>56 comment by: Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)</p>

	The method described in GM 1 5025 (a) is not relevant within the EUR-Region. The change that it should apply in general, and not only for supersonic flights, does not make it more relevant.
response	<i>Not accepted</i> Cruise climb techniques are used by aircraft for other than supersonic flights. Although supersonic flights are mentioned specifically in ICAO Annex 2 the note in paragraph 5.3.1, Annex 2, paragraph 5.2.2, considers that the cruise climb technique can also be used in uncontrolled airspace, not only by supersonic flights.
comment	62 comment by: Danish Transport Authority The method described in GM 1 5025 (a) is not relevant within the EUR-Region. The change that it should apply in general, and not only for supersonic flights, does not make it more relevant.
response	<i>Not accepted</i> Cruise climb techniques are used by aircraft for other than supersonic flights. Although supersonic flights are mentioned specifically in ICAO Annex 2 the note in paragraph 5.3.1, Annex 2, paragraph 5.2.2, considers that the cruise climb technique can also be used in uncontrolled airspace, not only by supersonic flights.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 6 Airspace classification - AMC1 SERA.6001(d); (e); (f); (g)

p. 22

comment	48 comment by: UK CAA Page No: 22 Paragraph No: AMC1 SERA.6001(d);(e);(f);(g) Classification of airspaces Comment: The proposed AMC is excessively detailed and should instead be re-focused and supported by appropriate GM. Contents of the safety assessment are not appropriate in the SERA regulation without a detailed and explicit methodology – these processes are catered for in OR/AR. The AMC does not adequately address the variety of alleviations that could be issued (national, local, specific time based, etc). Justification: Clarity and simplification Proposed Text: Change to read: <u>AMC SERA.6001(d), (e), (f) and (g) Classification of airspaces</u> SPEED LIMITATION – SAFETY ASSESSMENT AND APPROVAL BY THE COMPETENT AUTHORITY Where the Competent Authority approves an alleviation of the speed limitation of 250kts for flight below 3 050m (10 000ft), this shall be supported by a safety assessment and the details of the alleviation promulgated in the Member State Aeronautical Information Publication.
response	<i>Accepted</i> The AMC has been amended as proposed. However, the relevant material has been kept as GM.

**B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air -
Section 6 Airspace classification - GM SERA.6001(d); (e); (f) ;(g)**

p. 22-23

comment	21	comment by: ENAV
	<p>GM SERA.6001(d); (e); (f) ;(g) Classification of airspaces SPEED LIMITATION – SAFETY ASSESSMENT AND APPROVAL BY THE COMPETENT AUTHORITY For localised alleviations from the speed limitation, the safety assessment is normally conducted by the ATS provider and subject to approval by the competent authority. (a) (a) Where alleviation is applied universally across the airspace of the Member State, the competent authority should ensure that appropriate safety assessment has been conducted. <i>Though the service provider would necessarily take part to the safety assessment, the owner of such process shall either be the operator, who holds the operational need, or the CAA, as the authority harmonizing the various contributions.</i></p>	
response	<i>Partially accepted</i>	
	<p>The GM indicates that the safety assessment is carried out 'normally' by the ATS provider. This is done on purpose to consider airspaces such as Class G airspace. In airspace classes such as D and E, the most suitable entity which has the overall view of the airspace is the ATS provider. However, the relevant airspace users need to provide the relevant data. The GM has been amended to better reflect the intent.</p>	
comment	38	comment by: Spanish Air Force Staff
	<p>The "competent authority" functions should be described at regulation level; AMC and/or GM are not the proper place to identified new responsibilities for this authority. For this reason, the sentence "The competent authority ..." should be deleted form this GM.</p>	
response	<i>Not accepted</i>	
	<p>The proposed AMC and GM do not create nor introduce new obligations. When a requirement for the competent authority (or any other entity) appears in the text of a proposed AMC or GM, it is only as a reference or reminder, and serves as a link to the requirements already described in the relevant regulations.</p>	

**B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air -
Section 6 Airspace classification - AMC1 SERA.6001(h)**

p. 23

comment	49	comment by: UK CAA
	<p>Page No: 23 Paragraph No: GM1 SERA.6001(h) Classification of airspaces Comment: Inclusion of an intended duration of Class F airspace in an AIP is unnecessary, generates excessive text, could lead to confusion and contradicts the advisory nature of the suggested '3 years' life. The core requirement in the AIP (existence of Class F airspace, its designation, applicable levels and communications requirements) is already satisfied. The term 'duration' is ambiguous in that it could mean the daily operating hours</p>	

of said airspace (which will be promulgated in the AIP anyway); alternatively it could refer to the anticipated life of the airspace (i.e. when it is expected to be replaced by a more appropriate classification), which is irrelevant.

Justification: Appropriate AIP content.

Proposed Text: Delete sub para (a).

response *Accepted*

The GM has been amended to better reflect the intent and also to clarify the temporary duration of Class F airspace.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 6 Airspace classification - GM1 SERA.6001(h)

p. 23

comment 2

comment by: *Peter SCHMAUTZER*

Presently airspace F is used in Germany in order to enable IFR approaches on smaller airports in Germany, for instance Straubing. It is so managed that for the time of an instrument approach or departure Airspace F is activated. This has the advantage that airports can be performed at other times.

The possibility of LPV approaches, which can be established on every airfield with concrete runway gives the possibility to establish IFR traffic. Austrocontrol has the view that IFR approaches can only be performed in controlled airspace.

In order to use the above mentioned possibilities, it has to be clarified, that either such approaches can be performed in uncontrolled airspace, or the regulation has to give the possibility to activate such a controlled airspace for a short period of time.

response *Not accepted*

SERA recognises the options for States to create controlled airspace or not, depending on their national requirements, as well as the freedom of the competent authorities to decide upon the conditions associated with the activities of given portions of controlled airspace. SERA also offers tools like RMZ or TMZ which may be used to improve the safety of IFR flights outside controlled airspace. However, SERA does not prohibit IFR operations outside controlled airspace.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 7 Air Traffic Services - GM1 SERA.7005(a)

p. 23

comment 22

comment by: *ENAV*

GM1 SERA.7005(a) Coordination between the aircraft operator and air traffic services

GENERAL

The expression 'due regard' is meant to indicate that the air traffic services units, in their coordination with the aircraft operators, should take into account the obligations expressed by the operators specified in accordance with the European Union rules on air operations, and provide them with the information they require to operate in accordance with those rules.

response *Partially accepted*

The first proposed amendment is not accepted because it will limit the intent of

the implementing rule and this cannot be done at guidance material level. The second proposal is accepted.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 8 Air Traffic Control Service - GM1 SERA.8005(b)

p. 23-24

comment 29

comment by: AESA / DSANA

Regarding GM1 SERA.8005(b) Operation of air traffic control service
Please do notice in GM1 SERA.8005(b), it is said that the clearances for a pilot to maintain own separation in specific portion of the flights (below 10.000 ft, under visual meteorological conditions) in airspace classes D and E are based on the speed restriction of 250 knots is applied within those airspace classes.
However, in relationship with AMC1 SERA.6001(d), it is also stated that safety assessments are to be conducted by ATS providers when alleviations from the speed limitation of 250 knots bellow 10.000 ft are considered in airspace classes C, D, E, F, G.
Conclusion: In line with AMC1 SERA.6001(d), add the need for ATS provider to conduct the due safety assessment if needed in respect of applying clearances for pilot to maintain own separation in specific portions of the flights in airspace classes D and E and subject to the conditions established.

response Accepted

The GM has been amended to reflect the intention.

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 8 Air Traffic Control Service - GM1 SERA.8015(d)(4)

p. 24

comment 23

comment by: ENAV

GM1 SERA.8015(d)(4) Air traffic control clearances

CONTENT OF THE CLEARANCES - CLEARANCE FOR LEVELS

If the clearance for levels covers only part of the route, the air traffic control unit should specify a point to which the part of the clearance regarding levels applies.

ANNEX 11: *Note.*— *If the clearance for the levels covers only part of the route, it is important for the air traffic control unit to specify a point to which the part of the clearance regarding levels applies whenever necessary to ensure compliance with 3.6.5.2.2 a) of Annex 2.*

ANNEX 2: 3.6.5.2.2 If in instrument meteorological conditions or when the pilot of an IFR flight considers it inadvisable to complete the flight in accordance with 3.6.5.2.1 a), the aircraft shall:

a) unless otherwise prescribed on the basis of regional air navigation agreement, in airspace where radar is not used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20 minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan;

Since the proposed GM wording, if compared to the relevant ICAO Annex 11 note, widens the scope of the ATC practice, further clarification is needed.

response Partially accepted

Having regard to the current known practices and considering the pending

situation with regard to the RCF, the comment is understood and it is considered that the most appropriate action is to delete for the time being the GM initially proposed. Please note also SERA.8035(b).

**B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air -
Section 8 Air Traffic Control Service - GM1 SERA.8015(f)(4)**

p. 24

comment 24

comment by: ENAV

GM1 SERA.8015(f)(4) Air traffic control clearances

COORDINATION OF CLEARANCES - DOWNSTREAM CLEARANCE

(a) In such cases it is assumed that contact of a downstream ATC unit is initiated by the pilot. Therefore, the rules require that the aircraft maintains the necessary two-way communication with the current ATC unit.

(b) In cases where an aircraft cannot maintain two-way communication whilst obtaining a downstream clearance, the pilot needs to seek the acceptance to leave momentarily the communication channel of the current ATC unit prior to contacting a downstream ATC unit.

Suggest to delete (a) and turn (b) into an AMC to SERA.8015 (f) (4) (i).

response *Not accepted*

The proposal is not considered to be an acceptable means of compliance but guidance material as to how to achieve the objectives when not being able to maintain the necessary two-way communication with the current ATC unit. It is then up to the ATC unit to agree or disagree to the aircraft leaving the frequency and any conditions.

**B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air -
Section 9 Flight information service - GM1 SERA.9005(b)(2)**

p. 25

comment 25

comment by: ENAV

GM1 SERA.9005(b)(2) Scope of flight information service

INFORMATION RELATED TO COLLISION HAZARDS

The information relating to collision hazards include only known **activities that constitute risks** to the aircraft concerned. The availability of such information to air traffic services may sometimes be incomplete (e.g. limitations in radar or radio coverage, optional radio contact by pilots, limitations in the accuracy of reported information by pilots or unconfirmed level information) and, therefore, air traffic services cannot assume responsibility for its issuance at all times or for its accuracy.

ANNEX 11: Note 1.— The information in b), including only known aircraft the presence of which might constitute a collision hazard to the aircraft informed, will sometimes be incomplete and air traffic services cannot assume responsibility for its issuance at all times or for its accuracy.

Suggest to return to the original ICAO wording; preventing collisions in airspace with "activities" other than aircraft is not an objective of the air traffic services.

response *Not accepted*

The objectives of ATS include 'provide advice and information useful for the safe and efficient conduct of flight'. In case of e.g. parachute jumping, ATS would provide information on such activities too.

comment	<p>50</p> <p style="text-align: right;">comment by: UK CAA</p> <p>Page No: 25 Paragraph No: GM1 SERA.9005(b)2 Scope of Flight Information Service Comment: The GM is written for the provision of FIS to aircraft in Class C/D/E/F/G airspace. However, the risks and ability to provide collision warnings are not the same in these airspace classes. For Class C/D airspace, the collision warning requirement is met through the known traffic environment. However, there is a need for GM to make clear that in Class E/F/G airspace, air traffic services cannot guarantee that such warnings are passed. Justification: Appropriate GM. Proposed Text: Change to read: <u>GM1 SERA.9005(b)2</u> <u>INFORMATION RELATED TO COLLISION HAZARDS – CLASS E/F/G AIRSPACE</u> The information relating to collision hazards include only known activities that constitute risks to the aircraft concerned. The availability of such information to air traffic services in Class E/F/G airspace may sometimes be incomplete (e.g. lack of, or limitations to, radar or radio coverage; optional radio contact by pilots; limitations in the accuracy of reported information by pilots or unconfirmed level information). Furthermore, there may be circumstances that prevent air traffic services from providing timely collision warnings to aircraft in Class E/F/G airspace. Therefore, air traffic services cannot assume responsibility for its issuance at all times or for its accuracy.</p>
response	<p><i>Not accepted</i></p> <p>The existing conditions do not allow such a clear distinction between Information Service within and outside controlled airspace. It is assumed that limitations may also occur in controlled airspace. Therefore, it has been decided to keep the GM general without specifying airspace classes.</p>

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 11 Interference, Emergency Contingencies and Interception - GM1 SERA.11010	p. 25
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comment	<p>26</p> <p style="text-align: right;">comment by: ENAV</p> <p>GM1 SERA.11010 In-flight contingencies STRAYED OR UNIDENTIFIED AIRCRAFT - GENERAL (a) An aircraft may be considered, at the same time, as a 'strayed aircraft' by one unit and as an 'unidentified aircraft' by another unit. This possibility should be taken into account when complying with the provisions of SERA.11010(a)(1)(iii) and SERA.11010(b)(2). Also to be referred to SERA.11010 (b) (3).</p>
response	<p><i>Accepted</i></p> <p>The GM has been amended.</p>

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 11 Interference, Emergency Contingencies and Interception - GM1 SERA.11015(a)	p. 26
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comment	10	comment by: René Meier, Europe Air Sports
	GM 1 SERA.11015(a) is not clear to us: SERA were created to agree on common differences to be announced to ICAO, this is repeated in Art. 5 on page 45 of this document. Question: Is this provision not in contradiction with the basic idea of SERA?	
response	<i>Partially accepted</i>	
	The content of the SERA Regulation is the result of rulemaking process including consultations, which may lead to variations between the original intent and the final result. The GM will be amended to improve its wording.	
comment	27	comment by: ENAV
	GM1 SERA.11015(a) Interception REGULATIONS AND ADMINISTRATIVE DIRECTIVES ISSUED BY MEMBER STATES GOVERNING INTERCEPTION OF CIVIL AIRCRAFT Member States that do not comply with 'AMC1 SERA.11015(a) Interception' over the territory and territorial waters of the State are required to notify ICAO of a difference to ICAO Annex 2. Over the high seas ICAO Annex 2 is to be applied without exception in accordance with the Chicago Convention and this implementing rule, Chapter 1, paragraph 1.1 SERA.1001 (a) .	
response	<i>Accepted</i>	
	The GM has been amended.	

B. Draft Rules - I. Draft Part-SERA - AMC/GM to ANNEX Rules of the Air - Section 12 Services related to meteorology... - GM1 SERA.12020(a)(1)	p. 26
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comment	28	comment by: ENAV
	GM1 SERA.12020(a)(1) Exchange of air-reports Wrong reference, should be (3).	
response	<i>Accepted</i>	
	The GM has been amended.	

B. Draft Rules - I. Draft Part-SERA - AMC/GM to APPENDIXES - GM1 APPENDIX 4	p. 27
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comment	57	comment by: HungaroControl
	To the part 'Exemptions for special operations' (GM Article 4, Exemption, page 16): 'air policing operations' and 'disaster relief missions' could be added.	
response	<i>Not accepted</i>	
	The list of types of operations considered to be 'special operations' is contained in Article 4 and, therefore, cannot be amended by the AMC/GM. However, it should be noted that both policing operations and disaster relief missions are already covered by (a), (d), (e), (f) and (g) of the said article and, therefore, no change is considered necessary.	

