



INTERNATIONAL CIVIL AVIATION ORGANIZATION

A35-WP/114  
TE/16  
30/8/04

## ASSEMBLY — 35TH SESSION

### TECHNICAL COMMISSION

**Agenda Item 22: Development of an up-to-date consolidated statement of ICAO continuing policies related to air navigation**

#### **PROPOSED AMENDMENTS TO RESOLUTION A33-14 CONCERNING THE FORMULATION OF ICAO STANDARDS AND RECOMMENDED PRACTICES**

(Presented by the Russian Federation)

##### **SUMMARY**

The proposed amendments to Resolution A33-14, presented in A35-WP/8, affect one of the main aspects of ICAO's activities relating to the formulation of Standards and Recommended Practices (SARPs).

While supporting as a whole the approach to the simplification and reduction of the volume of SARPs, this paper contains proposals to further clarify the proposed amendments to Appendix A to Resolution A33-14. These further clarifications will make it possible to prevent different interpretations of the Resolution in the future, as well as avoid potential negative consequences for the SARPs that already exist or are being developed for complex aeronautical systems.

Action by the Assembly is in paragraph 3.

##### **REFERENCES**

A35-WP/8, TE/1  
Doc 9790, *Assembly Resolutions in Force* (as of 5 October 2001)

## 1. INTRODUCTION

1.1 In the Foreword to each of the Annexes to the Convention on International Civil Aviation, the following status is defined for Standards and Appendices:

“**Standard:** Any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38 of the Convention.

**Appendices** comprising material grouped separately for convenience but forming part of the Standards and Recommended Practices adopted by the Council.” (Underlined for the purposes of this paper.)

1.2 In view of the increasing complexity of modern aeronautical systems and the volume of technical Standards, in particular in Annex 10, the 32nd Session of the Assembly adopted in 1998 an amendment to the Consolidated statement of ICAO continuing policies and associated practices related specifically to air navigation (Resolution A32-14). These amendments form part of Resolution A33-14 now in force. Clauses 3 and 6 of Appendix A to this Resolution introduced two new and very important provisions.

1.2.1 According to one of these provisions, Standards for complex aeronautical systems are divided into requirements of a general nature (specifying system-level, functional and performance requirements) and detailed technical specifications. It is defined that the detailed specifications shall be placed either in Appendices to Annexes (in this case, they remain part of the Standards in accordance with the status of Appendices given above) or in other documents, for example Manuals (in this case, their status is reduced to the level of guidance material). The other provision introduced an abbreviated procedure for amendments to the detailed specifications contained in Appendices to Annexes, by which the Council can introduce these amendments without the lengthy and labour-intensive procedure of consultations with States.

1.3 In this way, the provisions contained in Clauses 3 and 6 of Appendix A to Resolution A33-14 help to simplify and reduce the volume of the Standards in accordance with the policy followed by ICAO in this area. The Russian Federation supports the policy to simplify and reduce the volume of ICAO Standards, with the understanding that the efforts made in this direction do not have a negative effect with respect to ICAO’s leading role as a legislator of international aviation Standards.

1.4 The amendments to Resolution A33-14, proposed in A35-WP/8, propose excluding the possibility of using Appendices to Annexes for the publication of detailed technical specifications and the subsequent explanation of the reasons proposes placing (or transferring) these specifications into Manuals or other documents.

## 2. DISCUSSION

2.1 Over the last six years, Standards for complex aeronautical systems were developed in accordance with the provisions adopted during the 32nd Session of the ICAO Assembly and contained in Clauses 3 and 6 of Appendix A to Resolution A33-14 in force. During these years, their effectiveness was demonstrated in ensuring the necessary flexibility for the activities of the Council of ICAO and the Air Navigation Commission (ANC) when deciding on the location and status of detailed technical specifications for complex aeronautical systems.

2.2 The further development of the provisions in force, proposed in particular in WP/8, proposes excluding the possibility of using Appendices to Annexes for the publication of detailed technical specifications. Such a proposal formally corresponds to the general policy to simplify and reduce the volume of ICAO Standards and it deserves the most serious attention.

2.2.1 In fact, ICAO SARPs cannot and should not include requirements for **all** technical details of complex aeronautical systems. However, it is not realistic to assume that the SARPs for such systems can ensure “the requisite safety levels” and systems compatibility without the corresponding detailed technical specifications. A detailed study of the amendments proposed in A35-WP/8, TE/1, gives rise to apprehensions that by no longer placing detailed technical specifications in Appendices to Annexes, this will belittle the significance of ICAO Standards and, as a result, will lead to the subsequent filling of the resulting regulatory niche by the industry or regional standards of RTCA, EUROCAE and others which do not have official status in many countries, including Russia, although they are well known in aviation circles.

2.3 It must be borne in mind that any proposed amendments to the procedures for the formulation and approval of SARPs should take into consideration the effect of these amendments on existing and future Standards. No analysis was made of this effect resulting from the amendments proposed in A35-WP/8, TE/1. One should also not exclude the fact that the proposed amendments may affect the problem of resources, in particular if this will require the revision of the structure of existing Standards. For example, even the simple transfer of detailed technical specifications from Appendices to Annexes into other documents will make it necessary to review the contents and structure of already published volumes, as well as to publish new Manuals or other documents. This will entail the corresponding financial consequences.

2.4 Furthermore, the wording proposed in A35-WP/8, TE/1, raises a number of questions. In particular, the meaning of the new term “supplementary detailed technical specifications” is not clear, nor is the difference between it and the term “detailed technical specifications” used in the existing Resolution A33-14.

2.5 In order to reach a compromise with respect to amending the text of Clause 3 of the operative part of Appendix A to Resolution A33-14 and to avoid potential ambiguous interpretations of the text of the new Resolution, it is proposed that it be drafted as follows:

“3. SARPs and PANS shall be drafted in clear, simple and concise language. For complex aeronautical systems, SARPs shall consist of broad, mature and stable provisions specifying system-level, functional and performance requirements that provide for the requisite safety levels. For such systems, detailed technical specifications necessary to achieve these requirements shall be appendices to Annexes. Any supplementary detailed technical specifications shall be placed in separate documents and be referenced in Annexes by means of notes.”

2.5.1 The proposed further clarifications are shown in detail in the Appendix to this paper.

2.6 The main purpose of the further clarifications is to:

- a) maintain the possibility of including, at the discretion of the ANC and the Council, detailed technical specifications having an impact on flight safety in Appendixes to Annexes when developing SARPs for complex aeronautical systems, such as GALILEO, modernized GPS and GLONASS;
- b) maintain existing detailed specifications in Appendixes to Annexes where they are related to flight safety aspects;
- c) maintain the abbreviated procedure of introducing amendments to detailed technical specifications with respect to both existing and new SARPs for complex aeronautical systems.

### 3. **ACTION BY THE ASSEMBLY**

3.1 The Assembly is invited to adopt the amendments to Resolution A33-14 together with the further clarifications contained in the Appendix to this paper.

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## APPENDIX

### FURTHER CLARIFICATIONS TO THE TEXT OF THE PROPOSED AMENDMENTS TO THE TEXT OF RESOLUTION A33-14, APPENDIX A

A33-14: Consolidated statement of ICAO continuing ICAO policies and associated practices related specifically to air navigation

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## APPENDIX A

### Formulation of Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS)

[Note. This Appendix reproduces the amendments to Resolution A33-14 in A35-WP/8, together with the further clarifications proposed in this paper; these further clarifications are underlined.]

...

*The Assembly resolves that:*

...

3. SARPs and PANS shall be drafted in clear, simple and concise language. For complex aeronautical systems, SARPs shall consist mainly of broad, mature and stable provisions specifying system-level, functional and performance requirements **that provide for the requisite safety levels.** For such systems, any necessary supplementary detailed technical specifications necessary to achieve these requirements shall be appendices to Annexes or be placed in separate documents. Any supplementary detailed technical specifications shall be placed in separate documents and be referenced in Annexes by means of notes.

...

6. Contracting States shall be consulted on proposals for the amendment of SARPs and PANS before the Council acts on them, except when the Council may deem urgent action to be necessary. Furthermore, **notwithstanding Resolving Clause 3 above and** subject to the adequacy of the verification and validation process, **amendments to existing** detailed technical specifications for complex systems may be acted upon by the Council without consultation with States. Such material shall however be made available to States upon request;

...

### **Associated practices**

1. The Council should ensure that provisions of SARPs and PANS are completely consistent with each other. Furthermore, the Council should endeavour to improve the processing, presentation and usefulness of ICAO documents containing SARPs, PANS and other related provisions, especially for complex systems and their associated applications. To that end the Council should promote the development and upkeep of broad system-level, functional and performance requirements. **The Council should continue seeking the most appropriate means of development, processing and dissemination of detailed technical specifications for complex aeronautical systems.**

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