



International Civil Aviation Organization

**The Twentieth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/20)**

Singapore, 05 – 09 July 2010

Agenda Item 8: Review Developments Relating to CNS/ATM Implementation

**IMPROVEMENT OF THE STATE LETTER CONSULTATION PROCESS ON
AMENDMENT PROPOSALS TO SARPS AND PANS**

(Presented by the Secretariat)

SUMMARY

The State letter Ref.: AN 1/1-10/32 was issued from the ICAO headquarters requesting States to comment on a proposed format of State letters to be used for the consultation process of SARPs and PANS.

This paper relates to

Strategic Objectives:

A: Safety – Enhance global civil aviation safety

D: Efficiency – Enhance the efficiency of aviation operations

Global Plan Initiatives:

All

1. INTRODUCTION

1.1 ICAO issued the State letter Ref.: AN 1/1-10/32 on 29 March 2010 regarding the improvement of the State letter as a consultation tool with States and international organizations regarding amendment proposals to Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS).

2. DISCUSSION

2.1 ICAO has been discussing ways and means for improving the effectiveness of the State letter as a consultation tool with States and international organizations regarding amendment proposals to SARPs and PANS, thus proposing a re-designed State letter format with the aim of enabling better participation through the use of electronic means. The proposed format features a simplified main covering letter and a description of the process in arriving at the proposed amendments. It is anticipated that comments on proposed amendments would be submitted online by an authorized focal point who should be nominated by the competent authorities using a form. The State letter focal point, comparable to the National Safety Oversight Audit Coordinator, would coordinate and manage State letters. An example of the proposed format was circulated for comments.

2.2 A State letter secure website is under construction to facilitate the online State letter responses. A plan to ensure smooth transition to the automated process is in progress. In the meantime, it was requested that the technical readiness survey be completed and returned no later than 14 May 2010. The authorized State letter focal point will be contacted for further action, as needed.

3. **ACTION BY THE MEETING**

3.1 The meeting is invited to note the information. Due date of 14 May has passed.

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International
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de Aviación Civil
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Международная
организация
гражданской
авиации

منظمة الطيران
المدني الدولي

国际民用
航空组织

Tel.: +1 (514) 954-8219 ext. 6390

Ref.: AN 1/1-10/32

29 March 2010

Subject : Improvement of the State letter consultation process on amendment proposals to SARPs and PANS

Action required: Comments on proposed format, Nomination Form and Readiness Survey to reach Montréal by 14 May 2010

Sir/Madam,

1. I have the honour to inform you that the International Civil Aviation Organization (ICAO) has been discussing ways and means for improving the effectiveness of the State letter as a consultation tool with States and international organizations regarding amendment proposals to Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS).
2. It is my pleasure to propose to you a re-designed State letter format with the aim of enabling better participation through the use of electronic means. The proposed format features a simplified main covering letter and a description of the process in arriving at the proposed amendments. It is anticipated that comments on proposed amendments would be submitted online by an authorized focal point who should be nominated by the competent authorities using the form at Attachment A. The State letter focal point, comparable to the National Safety Oversight Audit Coordinator, would coordinate and manage State letters. An example of the proposed format (Attachment B) is circulated for your comments.
3. A State letter secure website is under construction to facilitate the online State letter responses. A plan to ensure smooth transition to the automated process is in progress. In the meantime, I wish to request that you complete the technical readiness survey also described in Attachment A and return it to reach me no later than 14 May 2010. The results will serve as a foundation for preparing a transition plan. The authorized State letter focal point will be contacted for further action, as needed.

Accept, Sir/Madam, the assurances of my highest consideration.

Raymond Benjamin
Secretary General

Enclosures:

- A – Nomination Form and Technical Readiness Survey
- B – Example of proposed State letter format

ATTACHMENT A to State letter AN 1/1-10/32

NOMINATION FORM AND TECHNICAL READINESS SURVEY
(To be submitted by authorized official of nominating State)

To: Secretary General
International Civil Aviation Organization
999 University Street
Montreal, Quebec
Canada H3C 5H7

1. STATE LETTER FOCAL POINT (SLFOP)

Nominating State/Organization: _____

Authorized SLFoP: _____

Position/Title: _____

Department: _____

Address: _____

E-mail : _____

Telephone : _____

Fax : _____

2. TECHNICAL READINESS

<p>1) Please find below the recommended software specifications for online responses to the State letter and indicate whether your State/Organization meets these specifications. <i>Note: Other environments may also work, but ICAO cannot guarantee the results at this point.</i></p> <p><i>(To use an Acrobat form off-line)</i></p> <p>a. Adobe Acrobat Reader 9 (previous versions still to be tested)</p> <p><i>(To access the SL secure website and fill the online form)</i></p> <p>b. PC with Windows XP or higher</p> <p>c. Internet connection with SSL port 443 open through firewall</p>	<p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/></p>
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EXAMPLE OF
PROPOSED NEW STATE LETTER FORMAT¹
REGARDING NOTICE OF PROPOSED AMENDMENTS (NoPA)

Tel.: +1 (514) 954-8219 ext. 6712

Ref.: AN 7/1.3.96-09/57

30 June 2009

Subject: Notice of Proposed Amendment (NoPA) to Annex 10, Volume IV, concerning the airborne collision avoidance system (ACAS)

Action Required: Comments to reach Montreal by 13 October 2009

Sir/Madam,

1. I have the honour to invite your attention to proposed amendments to Annex 10 — *Aeronautical Telecommunications, Volume IV — Surveillance and Collision Avoidance Systems*, concerning the airborne collision avoidance system (ACAS). On 9 June 2009, the Air Navigation Commission conducted a preliminary review of the proposal with a suggested applicability date from 18 November 2010 and authorized its transmission to States and international organizations for comments.

2. The proposed amendment, as modified by the Air Navigation Commission, is contained in Attachment A. Background information on elements of the proposal including rationale and a brief summary of the discussions by the Air Navigation Commission is included for your convenience.

3. In examining the proposal, you should not feel obliged to comment on editorial aspects as such matters will be addressed by the Commission during its final review of the draft amendment.

4. May I request that any comments you may wish to make on the proposed amendments be submitted to reach me no later than 13 October 2009 by visiting the State letter secure website at (<http://portal.icao.int/xxxx>)².

5. The Air Navigation Commission has asked me to specifically indicate that comments received after the due date may not be considered by the Commission and the Council. In this connection, should you anticipate a delay in the receipt of your reply please let me know in advance of the due date.

¹ Developed by using and modifying text of existing State letter.

² Under construction.

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Accept, Sir/Madam, the assurances of my highest consideration.

Raymond Benjamin
Secretary General

Enclosure:

Proposed Amendment to Annex 10, Volume IV

DRAFT

ATTACHMENT to State letter AN 7/1.3.96-09/57

**PROPOSED AMENDMENT TO THE CONVENTION ON
INTERNATIONAL CIVIL AVIATION**

**INTERNATIONAL STANDARDS AND
RECOMMENDED PRACTICES**

ANNEX 10 – AERONAUTICAL TELECOMMUNICATIONS,

**VOLUME IV – SURVEILLANCE AND COLLISION AVOIDANCE
SYSTEMS**

NOTES ON THE PRESENTATION OF THE PROPOSED AMENDMENT

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

1. Text to be deleted is shown with a line through it	text to be deleted
2. New text to be inserted is highlighted with grey shading	new text to be inserted
3. Text to be deleted is shown with a line through it followed new text to replace existing text by the replacement text which is highlighted with grey shading.	new text to replace existing text

CHAPTER 4. AIRBORNE COLLISION AVOIDANCE SYSTEM

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4.3.5 Resolution advisories (RAs)

Background information leading to the amendment proposal

Origin: Working Group of the Whole (WGW/1) of the Aeronautical Surveillance Panel (ASP), 8 – 12 December 2008

Rationale:

The proposed introduction of these new requirements by ASP, namely the monitoring of own aircraft's vertical rate during a Resolution Advisory (RA) would be effected by implementing a new version of the collision avoidance system (CAS) logic (also called TCAS Version 7.1). It was noted that the new version of the logic also included a change in the RA annunciation from "Adjust Vertical Speed, Adjust" to "Level Off" which was seen to be simpler, more clear and easier to follow by pilots hence reducing incidences of pilots reacting to the RA in the opposite direction.

It was recalled that work on the proposal had been based on Recommendation 1/16 of the Eleventh Air Navigation Conference which, among other things, called upon ICAO to review current provisions and investigate the need to develop new provisions concerning collision avoidance logic in order to enhance the effectiveness of ACAS. It was agreed that the new version of the CAS logic would definitely bring significant safety benefits, though only if the majority of aircraft in any given airspace are properly equipped. It was pointed out that a prolonged period of mixed equipage was undesirable for the flight crews as they have different aural for some RA annunciations. It was also noted that technical standard orders were in preparation, associated pilot training didn't need to be extensive and that the subject amendments were expected to become applicable (as part of Amendment 85 to Annex 10) on 18 November 2010. As such, an aggressive implementation schedule entailing the equipage of new and all aircraft by 30 November 2010 and 31 March 2013 respectively, was considered.

Preliminary review by the Air Navigation Commission:

The debate focused on the lack of efficiency of a provision that does not mandate the installation of the new CAS logic on a majority of aircraft. In addition to new ACAS installations it was proposed to make the retrofit mandatory on all aircraft whose ACAS equipage is Version 7.1 compliant. In spite of recent figures provided by EUROCONTROL which indicated that retrofit costs would amount between USD7,500 and USD10,000, the Commission considered that additional feedback from States and the industry should be required before mandating the retrofit.

However, the original text was amended by adding a third Note specifying that compliance with this requirement can only be achieved through the implementation of TCAS Version 7.1 as specified in RTCA/DO-185B or EUROCAE/ED-143.

The issue of the applicability date was also raised with some questions regarding the availability of the upgraded software. Therefore, respondents to this State Letter are invited to comment:

- a) on the suitability of the proposed forward fit date of 1 January 2012 or otherwise; and
- b) on the extent of the effort needed for suitably equipping or upgrading existing aircraft, and in that connection, the earliest date an effective retrofit could be practically completed.

Amendment Proposal, as modified by the ANC discussions:

4.3.5.3.1 New ACAS installations after 1 January 2012 shall monitor own aircraft's vertical rate to verify compliance with the RA sense. If non-compliance is detected, ACAS shall stop assuming compliance, and instead shall assume the observed vertical rate.

Note 1.— This overcomes the retention of an RA sense that would work only if followed. The revised vertical rate assumption is more likely to allow the logic to select the opposite sense when it is consistent with the non-complying aircraft's vertical rate.

Note 2. — Equipment complying with RTCA/DO-185 or DO-185A standards (also known as TCAS Version 6.04A or TCAS Version 7.0) do not comply with this requirement.

Note 3. — Compliance with this requirement can only be achieved through the implementation of traffic alert and collision avoidance system (TCAS) Version 7.1 as specified in RTCA/DO-185B or EUROCAE/ED-143.

4.3.5.3.2 **Recommendation.**— All ACAS should be compliant with the requirement in 4.3.5.3.1.

Response Form

*Note: To enter comments, click the **Response Form** button and follow instructions. A similar window will open:*

Not applicable Agree with/without comments Agree subject to change Disagree

Comments/Justifications (including safety/cost benefits and implementation issues)

Proposed Text (please provide alternative text to amendment proposal)

- 1) **Not applicable:** The proposed amendment will not require any action since it doesn't apply to respondent's current civil aviation system.
- 2) **Agree with/without comments:** The respondent accepts the proposed amendment as it is, makes comments on safety/cost benefits and implementation issues, or suggest changes to the amendment to improve it. However, should this improvement be not introduced in the adopted amendment, the respondent would accept it as it was proposed in the State letter;
- 3) **Agree subject to change:** the respondent would not accept the proposed amendment unless the changes as proposed by the respondent are introduced in the adopted amendment.
- 4) **Disagree:** the respondent would not accept the proposed amendment under any circumstance.