



*International Civil Aviation Organization*

**The Fourth Meeting of the Asia/Pacific ICAO Flight Plan and ATS Messages  
Implementation Task Force (FPL&AM/TF/4)**

Bangkok, Thailand, 2 – 3 June 2011

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**Agenda Item 5: Aspects of implementation in Asia/Pacific region**

**Interpretation of Certain Field 10b Capabilities**

(Presented by the United States of America)

**SUMMARY**

In implementing the Amendment 1 changes, and in comparing with practices in other Regions (particularly Europe), some questions regarding interpretation of Field 10b filing of capabilities were raised.

**1. INTRODUCTION**

- 1.1 There is ambiguity regarding the expected practices for filing transponder and ADS-B capability. The United States Federal Aviation Administration (FAA) and Eurocontrol have interpreted them differently in terms of coding their automation, but have agreed on instructions to users.

**2. DISCUSSION**

Transponder Capability

- 2.1 Pre-Amendment 1, the instruction for Field 10b states that one letter should be included to define the transponder capability, optionally followed by a second letter for Automatic Dependent Surveillance capability.
- 2.2 In Amendment 1 the wording is changed to a generic “one or more of the following descriptors”. As worded, it is technically legal to include more than one letter for the transponder- but it appears there was no intention to allow or require multiple transponder letters.
- 2.3 The United States automation systems would have trouble with correctly interpreting multiple letters (e.g. if both “A” and “C” were filed). Today we interpret the A as meaning Mode A but no Mode C (even though the wording simply says Mode A). Therefore, the United States is instructing users to file only one letter for transponder, as is done today.
- 2.4 Eurocontrol automation will permit more than one transponder letter as long as they don’t conflict.

ADS-B Capability

- 2.5 Each of the three ADS-B link types—UAT, 1090-ES, and VDL—can be filed as “out” or “out” and “in”.
- 2.6 Based on the definition, the United States believes only one designator per link type should be filed (e.g. B1 or B2 but not B1B2). Including both is redundant. Therefore, the United States is instructing filers to include only one designator per link type.
- 2.7 Eurocontrol automation will accept both indicators for a link type, since they are not inconsistent (e.g. B1B2).
- 2.8 Note that if one letter for transponder is filed, and only one designator for each link type, the maximum possible size for Field 10b becomes 11 characters (1 character transponder; 6 characters ADS-B; 4 characters ADS-C).

**3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to
  - a) Note the information provided,
  - b) Consider submitting questions to ICAO regarding interpretation of these items, and
  - c) Decide whether agreement can be reached regarding flight plan filer guidance.

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