

International Civil Aviation Organization

The Fifth Meeting of the Asia/Pacific ICAO Flight Plan and ATS Messages Implementation Task Force (FPL&AM/TF/5)

Manila, Philippines, 8 - 9 November 2011

Agenda Item 4: Asia/Pacific implementation strategies and aspects

Implied DOF upon receipt of DLA message for EOBT change across 0000 UTC

(Presented by Australia)

SUMMARY

This paper presents the Australian interpretation and software coding requirements for receipt of DLA messages that change the EOBT across midnight UTC

1. INTRODUCTION

1.1 The APAC guidance material (V3) states that the preferred option for delaying flight over midnight UTC is to use a CHG message, however the option is available to use a DLA message. APAC Guidance (V3) states:

A DLA message could also be used to communicate a delay over 0000 UTC. However, in order to avoid any ambiguity it is recommended that a CHG message is used to communicate a delay over 0000 UTC ...

1.2 The CFMU Interface Manual for ICAO 2012 (V1.2) states:

It is important to understand that the 'last notified Off Block Date and Time' includes implicit modifications of the DOF over the midnight period e.g. a DLA which provides a one hour delay for a flight with an existing EOBT of 23:30 implicitly modifies the DOF.

1.3 Given that the option to use either a CHG of a DLA message to provide advice of delays across midnight UTC, States will need to software code their systems to cater for the receipt of both messages types.

2. DISCUSSION

<u>DLA</u>

2.1 Doc. 4444 (11.4.2.2.3.1) definition of DLA messages was not changed in Amendment 1 and currently states:

A DLA message shall be transmitted when the departure of an aircraft, for which basic flight plan data (FPL or RPL) has been sent, is delayed by more than 30 minutes after the estimated off-block time contained in the basic flight plan data.

2.2 Doc. 4444 was not modified as part of Amendment 1, to include cases where delays across 0000 UTC consequently result in an implicit change to the DOF. As a consequence, there may be different interpretations adopted as to the effect of delaying a flight across midnight UTC, unless strict adherence to the APAC guidance material / CFM Interface Manual is adopted i.e.

Either:

- I. The DOF shall be regarded to have changed as interpreted in the guidance documents; or
- II. The DOF is regarded as purely a message key and therefore shall only be changed via an appropriate modification (CHG) message.
- 2.3 On the ICAO Flight Plan Implementation Tracking (FITS website) clarification was sought and provided in relation to the intent of including field 18 in messages such as DEP or DLA:

"Field Type 18 with DOF specified is meant to uniquely identify the flight when the FPL is presented more than 24 hours in advance and there is no need to include all other Item 18 information"

2.4 In line with Australia's intended use of CHG messages to notify delay across 0000 UTC, this clarification means that the DOF used in the message structure is purely used to identify the flight for uniqueness and should only take the form of '-DOF/yymmdd' or '-0'. To illustrate, consider a flight (QFA577) with an intended EOBT of 0005 on November 16th 2012. The flight subsequently departs early with an ATD of 2359 on November 15th. It is Australia's interpretation that the DEP message will look like:

(DEP-QFA577-YSSY2359-YPPH-DOF/121116)

2.5 That is, the DOF does not change despite the flight departing on the earlier UTC date, as the DOF in the message serves as a means for the receiving centre to uniquely match their copy of the flight plan to that message.

CHG

- Australia will only send a CHG message as the appropriate means of advising delays across 0000 UTC. Australia is concerned that that not all states will necessarily assume that DOF automatically changes as a result of a Delay across midnight when notified via a DLA message. Based on the wording of 11.4.2.2.3.1 Doc. 4444 15th Edition, it is feasible that many states will see that the DOF as part of the message structure for uniqueness identification only and therefore only to be changed after receipt of an appropriate modification message i.e. CHG.
- 2.7 Doc. 4444 (11.4.2.2.4) states that:

A CHG message shall be transmitted when any change is to be made to basic flight plan data contained in previously transmitted FPL or RPL data. The CHG message shall be sent to those recipients of basic flight plan data which are affected by the change.

2.8 This definition better fits scenarios where DOF changes as it allows various elements within a flight plan to be modified, as opposed to the DLA message description which refers to EOBT only and therefore requires the receiving centre to either manually or automatically add a day to the DOF, on receipt. This is explained in the examples provided in both the CFMU Interface Manual and the APAC guidance material requiring that ANSPs that notify delays

via DLA, and those that receive notification via this means, need to make implicit changes to the DOF in field 18 of their flight plan:

2.9 CFMU:

- If the flight is delayed until 0200 the next day, the corresponding Delay message will look like this: (DLA-ABC123-EBBR0200-EDDF-DOF/100304). You will note that although the date of flight is now 05 March, the information in the Delay message is still referring to the original DOF which was 04 March.
- If, after having completed this message exchange, the flight is further delayed to 0400 on 05 March, the correct Delay message must look like this: (DLA-ABC123-EBBR0400-EDDF-DOF/100305). You will note that this Delay Message now shows 05 March as the EOBD since this is the date last communicated by the previous messages.
- 2.10 This is acceptable practice if all states adopt the same interpretation; if not any subsequent message exchanges will likely result in failure and rejection in automated systems. This requires that the sender and the receiver both implicitly update DOF within their systems in order to enable subsequent messaging to work correctly.
- 2.11 Australia believes that use of CHG message to advise delays across 0000 UTC represents a lower risk option than use of DLA messages and assumes that it is for this reason that the APAC guidance material, V3 states:
 - Example for use of a CHG message (page 16):

It is recommended to use a CHG message if a flight is delayed over 0000 UTC, indicating in Field 22 the amendments to both Field 13b and 18, the EOBT and the DOF. (Page 16)

• Paragraph 8.7 (page 17):

The use of the DLA message to communicate a delay over 0000 UTC (Example 2) is deceptive in that the new EOBD is not explicitly stated and the DOF in Field Type 18 does not correlate with the new EOBT.

• Paragraph 8.8 (page 17)

Where multiple flight plans have been filed (same Aircraft Identification, Departure, Destination but different DOF) it is recommended that CHG messages, including DOF, are used to advise delays. This will enable automated systems to clearly identify which flight is being referenced.

• General Message Examples (page 14):

Delaying the flight until the next day:

(CHG-ABC123-NZAA2300-VTBS-DOF/091120-13/NZAA0045-18/PBN/A1B1C1D1L1 DOF/091121) (CHG-ABC456-NZAA2300-VTBS-0-13/NZAA0045-18/PBN/A1B1C1D1L1 DOF/091121) Note:

- 1. When changing DOF insert the complete content of Item 18 in Field 22
- 2. CHG message (instead of DLA message) including the new EOBT and the new date of flight should be used if a flight is delayed over 0000 UTC.

3. ACTION BY THE MEETING

3.1 The meeting is invited to

c.

- a. Take note of the information provided, including Australia's rationale for only transmitting CHG messages to notify flight delays across 0000 UTC.
- b. Advise State intention in relation to transmission of delay information across 0000 UTC.

Identify any issues expected in the region.