Twenty Third Meeting of the
Informal South Pacific ATS Co-ordinating Group (ISPACG/23)

Santiago, Chile, 26-27 March 2009

Agenda Item 4: Review Open Action Items

DARP PROCEDURES

(Presented by Airways New Zealand)

SUMMARY

This paper captures the DARP procedure developed and agreed by the ISPACG planning team. The planning team recommends ISPACG agreement of the new procedure and that the procedure is submitted for inclusion in the Global Operational datalink Manual (GOLD).

1. INTRODUCTION

1.1 Work has been completed on an update to the existing DARP procedure contained in the FANS Operations Manual.

2. DISCUSSION

2.1 In March 2007 at ISPACG/21 Airways New Zealand presented a paper that included a proposed revision of the existing FOM DARP procedure. This revision was discussed and it was decided that as more work was needed on the proposal than could be achieved at the meeting the proposal would be handed back to the planning team for further work.

2.2 This work was completed at PT/5 in Brisbane and in subsequent email exchanges between the interested parties. A planning team agreed DARP procedure is now available for ISPACG agreement. This is attached in Appendix A to this document.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) Agree the attached DARP procedure.
b) Agree that the attached DARP procedure be submitted for inclusion in the draft GOLD document.

Appendix A: Reroute Procedures - DARP

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Appendix A:

RE-ROUTE PROCEDURES – AIRLINE OPERATIONS CENTRE (AOC) INITIATED - DARP

Purpose

To allow Airline Operations Centres to initiate the process to have an airborne aircraft issued a revised routing clearance

Requirements

- These procedures should be used where the DARP will occur in FIRs that have implemented Air Traffic Services Interfacility Data Communications (AIDC) which permits the electronic exchange of revised route information.

- The following Pacific ANSPs have implemented AIDC operationally:
  - Auckland
  - Brisbane
  - Nadi
  - Oakland
  - Fukuoka
  - Anchorage

- For airborne rerouting, the following operational requirements apply:

  1. CPDLC is required for aircraft requesting airborne DARP.
  2. The re-route request should be made at least 60 minutes prior to the next FIR boundary to permit AIDC messaging to take place between the affected ANSPs. (This may be reduced between ANSPs with AIDC coordination LOA's in place to enable the modification of route information via CDN messages)
  3. The downlink CPDLC re-route request should be made by the flight crew at least 20min before the divergence waypoint to allow processing time by ANSPs and flight crew.

  Note: A re-route request may be made to a new ANSP immediately after crossing the FIR boundary provided points 2. and 3. above still apply.

RE-ROUTE PROCEDURES –
AIRLINE OPERATIONS CENTRE (AOC) INITIATED – DARP (Continued)

STEP 1
Airline Operations Centre

✈ The Airline Operations Centre generates the DARP request commencing from a waypoint on the current route ahead of the aircraft and finishing at destination including waypoints for any FIR boundaries crossed and advises the flight crew of the re-route.

✈ Because of ANSP system differences AOC shall ensure that the elements used to define a DARP request comply with ICAO PANS/ATM Doc4444 formatting rules. The elements that may be used are:

- Fix Names. ARINC 424 fix names used to define latitude and longitude positions shall not be used.
- Airway Designators. Where an airway designator is used it should be preceded and followed by a fix name or navaid designator that is part of the airway described.
- Navaid Designators.
- Latitude and Longitude. The ICAO requirement is that position shall be defined in either whole degrees of latitude and longitude e.g. 35S164E or using DDMM for both latitude and longitude e.g. 2513S15645E. A mixture of these formats should be avoided e.g 35S15725E.

STEP 2
Flight Crew

✈ Where required, delete any waypoints already crossed on the proposed DARP.

✈ Providing the proposed DARP is acceptable to the flight crew, downlink the route request to the controlling ANSP using the CPDLC message element **DM24.**

REQUEST [departure airport: xxxx destination airport: xxxx (fix1)(fix2)(fix3)…..]

Where (fix1) is the next waypoint ahead of the aircraft on the current route.

Note: *Flight crew procedures should include guidance on downlinking CPDLC message element* ***DM24****.*

RE-ROUTE PROCEDURES –
AIRLINE OPERATIONS CENTRE (AOC) INITIATED – DARP (Continued)

STEP 3
ANSP

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✈ Where the requested clearance is available:

- Uplink route clearance using CPDLC message element **UM83:**

  AT [fix 1] CLEARED [departure airport: xxxx destination airport: xxxx (fix2) (fix3)….]

  Where (fix1) is the next waypoint ahead of the aircraft on the current route.

  Note: *Some ANSPs may not include the departure airport in the uplink clearance. Flight crew training shall ensure that crews are aware of this possible difference.*

✈ Where the requested clearance is not available:

- Uplink to flight crew "UNABLE. [DUE TO REASON] (e.g. UNABLE DUE TO TRAFFIC)"

Note: *ANSPs shall not modify the intent of the route without advising the flight crew. This does not exclude removal of waypoints that have been overflown prior to a clearance uplink.*

STEP 4
Flight Crew

✈ On receipt of a re-route clearance from the ANSP, the flight crew shall:

- Load the clearance into the FMS and if able to comply, accept the clearance. This will result in an acknowledgement (WILCO) message being sent to the ANSP confirming that the clearance will be complied with.

✈ Where the re-route request is rejected by the ANSP, the flight shall continue in accordance with existing ATC clearance.

✈ Advise AOC of clearance status.

RE-ROUTE PROCEDURES –
AIRLINE OPERATIONS CENTRE (AOC) INITIATED – DARP (Continued)

Figure 1: The DARP process