



International Civil Aviation Organization

**EIGHTEENTH MEETING OF THE COMMUNICATIONS/NAVIGATION
AND SURVEILLANCE SUG-GROUP (CNS SG/18) OF APANPIRG**

Asia and Pacific Regional Sub-Office, Beijing, China
(21 – 25 July 2014)

Agenda Item 5.2 Update on status of datalink applications by States

IMPLEMENTATION OF DCL/D-ATIS/D-D-VOLMET IN THE NEW ZEALAND FIR

(Presented by Airways Corporation New Zealand)

SUMMARY

This paper presents detail on progress by New Zealand to design and implement datalink based departure clearance delivery using DCL and D-ATIS. D-VOLMET is also being implemented as part of the technology upgrade. The paper also highlights the main issues that have been encountered.

1. INTRODUCTION

1.1 Departure clearance delivery within the New Zealand FIR is currently voice based. Over the last 10 years there has been increasing demand by airspace users for alternatives due safety and efficiency concerns

1.2 Airways Corporation has been reviewing options and, based on the level of user interest coinciding with technology replacement, has embarked on a departure clearance upgrade with DCL, D-ATIS and D-VOLMET representing the first phase

2. DISCUSSION

2.1 Primary motivators for the enhancement of departure clearance delivery are:

- Safety issues. Namely ‘hear-back, read-back’ issues when conveying information by voice and transposition type errors when recording clearance information
- Frequency congestion. Occurs at peak times at NZ’s 3 main airports

2.2 Airways Corporation has had to define a solution to the above motivators that fits all user types. DCL/D-ATIS is being implemented now with a PDC solution being researched for users that can’t use DCL but want silent clearance delivery. Voice will be retained for users that cannot participate in either new option

2.3 DCL (in accordance with ED-85A) is intended to meet the needs of the high cost end of the user group – suitably equipped jet operations. Jet operations represent the highest concentration of eligible users and operate primarily from NZAA, NZWN and NZCH when congestion is highest. As such initial DCL implementation will only be at these locations.

2.4 D-ATIS (in accordance with ED-89A) is being implemented as part of a wider upgrade of the domestic ATIS system and will mean that D-ATIS information will be available for all locations where an aerodrome service is provided to any user within coverage of the applicable DSP network

2.5 D-VOLMET, though not required for departure clearance delivery, D-VOLMET is being implemented as part of the procured ATIS system and will address latency and delay issues present in the current HF based VOLMET service

2.6 The project has progressed to the point where:

- Airways has selected both a D-ATIS/D-VOLMET system and DCL system;
- The technical configuration of each system has been agreed;
- Technical and software training is about to commence;
- End to end trialing with participating airline test aircraft will take place FY 2015
- D-ATIS/D-VOLMET are intended go operational with the new ATIS system's activation in FY 2015; and
- DCL is intended to go operational in FY 2016

2.7 A number of issues have been encountered during the design phase two of which stand out:

- The low numbers of DCL/D-ATIS eligible aircraft – only 35% of the total airspace users (domestic and international). However increasing numbers of modern jet types will raise the jet fleet capability to around 70% by 2018. DCL will target this user group; and
- The format of the DCL message set conflicting with current clearance delivery content in New Zealand. Current New Zealand clearance format contains route detail and final cleared flight level. DCL CLD/CDA formats do not support route/final CFL. As such, and due to airspace user request for New Zealand to standardize to global practice, Airways has begun to review its departure clearance delivery format to determine the process of change. This process is expected to be complete by the end of FY 2015.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.
