



International Civil Aviation Organization

**NINETEENTH MEETING OF THE COMMUNICATIONS/NAVIGATION  
AND SURVEILLANCE SUB-GROUP (CNS SG/19) OF APANPIRG**

Bangkok, Thailand, 20 – 24 July 2015

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**Agenda Item 6: Surveillance**

**NEW ZEALAND “FUTURE SURVEILLANCE NATIONAL PLANNING PROJECT”  
FOR THE NZZC FIR**

(Presented by Airways New Zealand)

**SUMMARY**

This paper updates the meeting on Airways New Zealand plans for replacement of the current surveillance systems within the NZZC FIR.

**1. INTRODUCTION**

1.1 The aim of Airways “Future National Surveillance Project” is twofold. First to ensure a seamless transition to new surveillance technology prior to 2021. Secondly, to identify replacement surveillance systems that will meet the future needs of Airways New Zealand stakeholders.

1.2 Any replacement system(s) must meet the requirements outlined in the New Zealand Government national airspace and air navigation plan “New Southern Sky” (NSS), with SAFETY being the primary focus of all work under NSS. The future surveillance systems will include Automatic Dependent Surveillance-Broadcast (ADS-B).

**2. DISCUSSION**

2.1 Airways “Future Surveillance National Planning” project involves:

2.1.1 **A study of current Airways surveillance services.** The study has assessed the feasibility of keeping the existing Surveillance systems operable until at least 2021 and possibly beyond. This study has now been completed and is with Airways management for review.

2.1.2 **A safety case for replacement surveillance services.** The safety case is currently in progress and the initial DRAFT report is expected to be delivered by Mid-August 2015. Due to the complexity and impact of the project, an external consultant has been tasked with facilitating the safety case.

2.1.3 **ADS-B RFI.** Airways released an ADS-B Request for Interest (RFI) in May 2015 to Five Vendors. Replies have been evaluated and a Request for Proposal ( RFP) is expected to be produced by the end of September 2015.

2.1.3.1 As part of the RFI program, Airways will conduct a trial of selected Vendor equipment in Christchurch during August and September 2015. The results of this trial will be reflected in the RFP requirements.

2.1.4 **ADS-B RFP.** The proposed RFP will have three phases

2.1.4.1 Phase 1: A dual antenna installation will be located near Christchurch as a backup for the current MSSR and PSR. Phase 2: An additional 5 dual antenna installations will be located on or near the remaining MSSR sites.

2.1.4.2 Phase 3: An additional 13 to 17 dual antenna installations will be located at various regional sites to ensure full surveillance coverage of all air transport traffic within the NZCC FIR.

2.1.5 **RFP for a contingency surveillance system.** This system will provide back-up coverage over the three major domestic airports and the route structure between them. The requirements of this system are subject to the work being carried out in 2.2 below.

2.2 The NSS Safety Group (comprising the CAA, Airways and the Ministry of Transport), is examining the feasibility of GNSS sole means navigation. The outcome of this work will also inform the development of safety criteria for the future surveillance systems and could have a significant impact on the project requirements.

### **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.

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