

**15th Meeting of the
Informal South Pacific ATS Co-ordinating Group Planning Team
(PT 15)**

**Papeete, Tahiti
5 March 2014**

Agenda Item 6: Other Business

Aereon Global ADS-B

Presented by Airways New Zealand

SUMMARY

This paper discusses the development of Aireon global ADS-B surveillance and proposes the development be tracked by ISPACG PT under open action items.

1. INTRODUCTION

- 1.1 The Aireon concept envisages ADS-B receivers installed on the Iridium Next Low Earth orbit constellation with a launch date 2016-2018 and could provide substantial benefits for Oceanic ATM operations.

2. DISCUSSION

- 2.1 The ICAO 12th Air Navigation Conference supported the inclusion in the Global Plan of space based ADS-B as a surveillance enabler. .
- 2.2 Nav Canada are developing a concept of operations for North Atlantic oceanic airspace. Their concept of operations provides for a 15 second update rate, and is proposing 15NM separation standards on the NAT with 15NM longitudinal available in late 2017, and 15NM lateral in 2019. While Aireon will definitely provide enhanced surveillance the proposed separation standards of 15NM are not far below what can be achieved with proposed RNP2 (20NM) and existing ADS-C and ADS-B in climb & descent procedures.
- 2.3 Published presentations propose a saving of \$3.2M on the Tasman in 2018 which seems optimistic. For Tasman operations feedback from ANZ is that cleared flight levels up to 2000' below planned will not result in fuel penalty and level availability is not currently seen as a critical issue in Tasman airspace. Current lateral separations of 30NM/50NM will reduce to 20NM with proposed RNP2 navigation standard.
- 2.4 Unknown is the projected cost of the service and cost benefit will determine eventual implementation.



3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Add into open action items the consideration of Aireon ADS-B as a surveillance option in SOPAC oceanic airspace.