



International Civil Aviation Organization

**The Sixteenth Meeting of the Regional Airspace Safety Monitoring
Advisory Group (RASMAG/16)**

Bangkok, Thailand, 20 – 24 February 2012

Agenda Item 4: Airspace Safety Monitoring Documentation and Regional Guidance Material

ASIA PACIFIC REGIONAL LONG TERM HEIGHT MONITORING

(Presented by IATA)

SUMMARY

This paper presents recognises the availability of ADS-B as a cost effective solution to enable long term height monitoring capability.

This paper relates to –

Strategic Objectives:

A: *Safety – Enhance global civil aviation safety*

Global Plan Initiatives:

GPI-2 Reduced vertical separation minima

GPI-12 Functional integration of ground systems with airborne systems

1. INTRODUCTION

1.1 In September 2009 APANPIRG/20 adopted the Asia Pacific Regional Impact Statement prepared by the Regional Airspace Monitoring Advisory Group (RASMAG) to provide general guidance to States in the provision of RVSM Long Term Height Monitoring.

1.2 It is recommended that the monitoring programme should make provision for a combination of ground-based systems (HMU, AGHME and potentially ADS-B) as well as airborne systems (GMU).

1.3 The Regional Impact Statement has since been updated with version 3 adopted in October 2010.

2. DISCUSSION

2.1 At RASMAG/15 1-4 Aug 2011, Australia reported that both the Separation and Airspace Safety Panel (SASP) and Regional Monitoring Agencies Coordination Group (RMACG) had now formally endorsed the use of ADS-B as a height monitoring system.

2.2 With ADS-B now a viable solution, it is important that ADS-B be recognised as such with an amendment in the Regional guidance material.

2.3 Furthermore, it is important that the potential cost effectiveness of ADS-B should also be recognised.

2.4 The impact statement itself notes the significant cost of installing, operating and maintaining Height Monitoring systems. However with ADS-B, its prime function as a surveillance tool can enable significant cost advantages for RVSM Monitoring over a dedicated facility.

2.5 Given the number of States with Asia Pacific with ADS-B programs underway, there is significant potential for a wide matrix of Height Monitoring capability based on ADS-B within this region.

2.6 Recognising that ADS-B requires aircraft equipage and potentially equipage mandates, there may be a delay before this capability can be fully utilised. However given the significant potential cost savings, this capability should still be considered before we see a proliferation of dedicated ground based facilities.

2.7 The impact statement concludes:

APANPIRG in close coordination with RASMAG and Asia/Pacific RMAs will need to be involved in recommending the types and appropriate locations of monitoring systems to most effectively monitor the Asia/Pacific aircraft population with the least infrastructure investment.

2.8 It is therefore appropriate for APANPIRG and RASMAG to develop a plan that should consider ADS-B as a preferred solution for RVSM Height Monitoring where the appropriate capability exists or is planned to exist in the medium term.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) support ADS-B as the preferred solution for RVSM Height Monitoring where suitable capability exists or will exist in the medium term;
- c) Encourage States to reassess current implementation plans for the implementation of dedicated ground based facilities where ADS-B may provide a more cost effective alternative;
- d) Revise the regional plan ‘recommending the types and appropriate locations of monitoring systems to most effectively monitor the aircraft population with the least infrastructure investment’;
- e) Coordinate efforts with adjacent regions; and
- f) discuss any relevant matters as appropriate.

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