



International Civil Aviation Organization

**Second Meeting of the Southeast Asia Route Review Task Force
(SEA-RR/TF/2)**

Bangkok, Thailand, 22 – 26 March 2010

Agenda Item 6: ATS Route Development

SOUTH CHINA SEA ROUTE

(Presented by IATA)

SUMMARY

The paper discusses the situation with the South China Sea Routes.

1. INTRODUCTION

1.1 When the current South China Sea route structure was established, it supported the implementation of RNP10 separations with potential for RNP4. Since that time there have been some changes in the ATM capability of some states allowing potential in the short term and current plans will support future enhancements.

2. DISCUSSION

2.1 When RNP-SEA was formed, it was specifically tasked with the implementation of 50nm longitudinal separations as well as planning towards RNP4. They were however only partly successful however, with 50nm longitudinal only applied on L642/M771. The RNP-SEA has since been dissolved.

2.2 The continued lack of datalink capability means reduced separations cannot be applied on routes transiting the Manila FIR. APANPIRG/19 recognised this limitation adopting conclusion 19/12 calling for accelerated implementation of datalink in the Manila FIR. This was formalised with an ICAO State Letter in December 2008.

2.3 At SEA-RR/TF/1, Manila commented that plans were in action for an interim datalink installation expected in the first half of 2010. The delivery of this capability with the availability of operational separations will fulfil Manila's obligations under the APANPIRG conclusion while also bringing its capabilities into line with the separation standards applied in adjacent FIRs.

2.4 IATA looks forward to the confirmation of these plans with the associated ability to establish firm timelines for testing, operationalisation and the delivery of separations based on datalink capability. This will also enable this task force to plan with some certainty utilising the much-anticipated capability of datalink within Manila FIR.

2.5 At SEA-RR/TF/1, the meeting discussed several proposals that could provide increased efficiencies in the short term. These were:

- Uni-directional crossing routes MNL-HKG, MNL-BKK and BSW-BKK
- Realignment and unidirectional routes A1 and A202 HKG-BKK
- Realignment L642/M771

2.6 IATA noted that the primary routes L642/M771 currently enjoyed almost complete coverage by radar surveillance and VHF communication. There is in fact only one gap in coverage between Vietnam and Singapore.

2.7 IATA also noted the work of the SEA ADS-B WG, in particular the South China Sea project involving Indonesia, Singapore and Vietnam. The project involves co-location of ADS-B receivers and VHF transceivers including off shore islands and the data sharing between states. The net effect of this project is much extended coverage into the South China Sea and complete surveillance and VHF coverage along L642/M771.

2.8 At SEA-ADS-B WG/5 in January 2010, proposed timelines were presented that could enable operational separations being applied utilising ADS-B in late 2011/ early 2012.

2.9 Based on the broad principles discussed at SEA-RR/TF/1, IATA proposed that rather than designating these two routes as RNP4, potentially RNAV5 may present more advantages based on the complete surveillance and VHF coverage. However with various requirements of the ADS-B program still to be fulfilled (such as publishing equipage requirements), the benefits of RNAV5 on these two routes are still some way off.

2.10 There is potential however, to make almost immediate benefit of the existing infrastructure by allowing RNP4 type separations.

2.11 Traffic data on these routes suggests that a large proportion of aircraft operating on these routes are already capable of RNP4. IATA does not propose that these routes should be redesignated but simply that states be allowed to apply RNP4 separations between suitable equipped aircraft.

2.12 This would enable some increase in capacity which should help sustain operational efficiency until such time as RNAV5 can be implemented utilising ADS-B.

3. ACTION BY THE MEETING

3.1 The Philippines is invited to:

- a. Confirm its plans for implementation of datalink capability including proposed timelines for:
 - Testing of equipment
 - Commencement of operational trials

3.2 The meeting is invited to:

- a. Discuss the benefits of enabling RNP4 separations on L642/M771 in the short-term
- b. Endorse the principle of establishing L642/ M771 as RNAV5 routes in the medium term
- c. Consider how the capabilities of Manila FIR should best be utilised

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