International Civil Aviation Organization

Third Meeting of the Southeast Asia Route Review Task Force (SEA-RR/TF/3)

Bangkok, Thailand, 24 – 27 August 2010

Agenda Item 6: ATS Route Development

UNIDIRECTIONAL CROSSING ROUTES IN SOUTH CHINA SEA AREA

(Presented by the Secretariat)

SUMMARY

This working paper focuses on the development of Unidirectional routes to replace present bidirectional single routes crossing the primary South China Sea route structure.

1. INTRODUCTION

1.1 The meeting is reminded that a proposal was put forward to both the 1st and 2nd meetings of the SEA-RR/TF. Previous discussions on this subject appears to indicate that further work is required before a viable plan can be put in place to obtain full agreement of all parties involved.

2. DISCUSSION

2.1 The meeting is invited to recall that 4 specific crossing routes had been mentioned for consideration in the establishment of parallel unidirectional crossing routes to replace the existing bidirectional routes which are presently in place. These are:

a) M768 Brunei to TSN
b) L628 Manila to PCA
c) A461 Manila to Hong Kong
d) B462/ B348 Manila to Taipei

2.2 Whatever changes are considered, the unidirectional pairs should be commenced at a single point which may be the departure airport in some instances, then diverging to a lateral spacing of 50 to 60 NM, depending on future requirements regarding RNP4 capability. They would then parallel each other prior to crossing the primary traffic flow and once clear of that flow, commence convergence back to a single route. This last process should be within radar coverage.

2.3 Another consideration to take into account would be whether the longitudinal spacing on these parallel routes should be 80NM or 50NM, depending on CPDLC/DCPC ability. This could vary depending on which pair of crossing routes are being considered.

2.4 The meeting, when looking at the specifics of each pair of routes, should evaluate whether the subject pair of routes would be designed using the present route as one of the routes and adding another route either left or right, or designing 2 new routes and deleting the present route altogether. Factors to be taken into consideration should include:

a) Other routes in close proximity to the new routes which may mean positioning the new route(s) to remain clear of another published ATS route;

b) Radar surveillance capability with regard to proposed changes;

c) Benefits and efficiencies in the new design of the crossing routes;

d) With the benefits gained on unidirectional crossing routes, sharing of some flight level allocations with the primary route system.

Establish a Small Working Group (SWG) to produce the new crossing routes

2.5 It is suggested that a SWG be established comprising concerned States and organizations to move forward on this initiative, taking into consideration all the aspects needed when introducing a new route design and structure.

2.6 It is also suggested that the SWG looks at each pair of crossing routes individually as their design may change depending on other issues in each area. Notwithstanding this suggestion, from an operational safety and efficiency point of view, a decision to change the present method of flight level allocation needs to be uniform along all crossing routes in the area under consideration.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) using the facilities of a SWG, justify, plan and establish a unidirectional parallel route structure for routes crossing the primary route structure in the South China Sea, taking into consideration;

i) The four main crossing routes mentioned in para 2.1 above;

ii) Division of flight level allocation between primary and crossing routes;

iii) Other ATS routes which may be affected by the project and steps to alleviate any issues; and

iv) The need for uniformity in changes to the present flight level allocation scheme.

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