



International Civil Aviation Organization

**Fourth Meeting of the Southeast Asia Route Review Task Force
(SEA-RR/TF/4)**

Bangkok, Thailand, 22 – 26 November 2010

Agenda Item 6: ATS Route Development

UNI-DIRECTIONAL CROSSING ROUTES

(Presented by IATA)

SUMMARY

This paper discusses the proposal to establish a uni directional circular flow between Manila and Bangkok based on the Regional PBN Implementation Plan with the aim of enhancing the route capacity, operational efficiency and environmental considerations.

1. INTRODUCTION

1.1 The SEA-RR/TF 1 (8 – 11 Dec 2009) recommended a review of the existing routes be conducted to identify those that could be enhanced to improve en-route airspace efficiency, taking into account the need for inter-regional harmonization

1.2 The meeting noted IATA's outlook on Southeast Asia Route Review as the AR9 traffic flow encompasses operations within several FIRs and majority of the busiest airports in the Asia Pacific Region. Among these are Manila and Bangkok.

1.3 IATA also proposed several fundamental principles to be considered when reviewing the routes including the use of uni directional routes.

1.4 At SEA-RR T/F 2, the Philippines presented WP/10 to establish a new route parallel to L628 which would meet the objectives of enhancing route capacity, operational efficiency and environmental outcomes.

1.5 This paper supports and builds on the Philippines proposal and attempts to clarify some of the issues raised in discussions at SEA-RR TF/2 & 3.

1.6 In particular the meeting should note that the primary intention in establishing uni-directional crossing routes is NOT to increase capacity on these crossing routes, it is to increase capacity on the primary flows by enabling increased availability of levels.

2. DISCUSSION

L628

2.1 In the revised WPAC/SCS RVSM FLAS, the NO-PDC FLs on L628 allocates the following flight levels based on the direction of flight

↗ Eastbound = FL330, 370, 410

↗ Westbound= FL280, 340

2.2 L628 crosses the following major routes with associated level assignments;

↗ L642 (Southbound) FL 310, 320, 350, 360, 390, 400

↗ M771 (Northbound) FL 310, 320, 350, 360, 390, 400

↗ N892 (Southbound) FL 310, 320, 350, 360, 390, 400

↗ L625 (Northbound) FL 310, 320, 350, 360, 390, 400

↗ M772 (Northbound) with level allocation of FL300, 380

↗ M754 (Bi-directional)

○ FL290, 330, 370, 410 (Southbound) and

○ FL300, 340, 380 (Northbound)

↗ A583 (Bi-directional)

○ FL290, 330, 370, 410 (Southbound) and

○ FL300, 340, 380 (Northbound)

↗ W 1 & 2

2.3 Note same altitude is used in both directions for the SCS primary routes L642/M771/N892/L625.

Proposed New Parallel Route

2.4 VTBS – GOMES – SRE – N 13 02 37.00/ E 109 07 43.00 – N13 00.0/E 114 42.8 – N 13 12.2/E 116 47.6 – N 13 46.5/E 118 36.8 – N14 09.4/E 119 51.4 – RPLL (this is indicative only and could be revised if required by States)

2.5 To gain maximum benefit, it is proposed that allocated Flight Levels available on L628 and the New Route be reduced (for example FL280, 340,410) and available in both directions. This proposal retains six Flight Levels available between Manila and Bangkok (three each route) and frees up altitudes for the other major routes

2.6 FL 370 could be available with coordination

2.7 The new route and L628 would be expected to be designated as RNAV10 routes with appropriate lateral spacing

2.8 An example of the proposed route and potential level arrangements is at attachment A.

Benefits

2.9 Primary SCS routes are becoming congested. The proposal contained in the paper will allow more Flight Levels to be available to traffic on the Main Routes in the flow. i.e. FL 330 & 370 both northbound and southbound

2.10 Vietnam – Increasing domestic traffic operating on W1 and W2 in Vietnam will have access to more Flight Levels (FL 330 & 370) than are currently available with L628. This will allow more flexibility for traffic and increased capacity for these busy domestic routes.

2.11 Manila (from SEA-RR TF/2 WP10) – Establishing Uni Directional traffic flows will help to address operational issues (merging traffic, bunching of traffic) and prevent potential conflicts at the intersecting points. Will allow airspace users more access to optimum flight levels, ATC has more flexibility in selecting alternative flight levels and ultimately, the environment benefits thru reduced carbon emissions.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to endorse the following proposals:

- a. Establishment of additional route parallel to the existing ATS/RNAV Route L628 with RNAV10 category
- b. Upgrading of ATS/RNAV Route L628 into RNAV10 category
- c. Discuss allocating FL280, 340, 410 as the No-PDC FLs for the uni-directional parallel routes; with FL370 available with coordination.

Attachment A Example of proposed route and level arrangements

