International Civil Aviation Organization

The First Meeting of ICAO Asia/Pacific Performance Based Navigation Implementation Coordination Group (PBNICG/1)

Beijing, China, 10-12 March 2015

Agenda Item 7: Regional and Sub-Regional Implementations of PBN in En-Route Airspace

SCS-MTFRG/1 MEETING OUTCOMES RELATED TO PBN IMPLEMENTATION

(Presented by Secretariat)

SUMMARY

This paper presents PBN implementation related outcomes of the first meeting of South China Sea Major Traffic Flow Review Group, which was held at the Department of Civil Aviation Malaysia Headquarters, Putrajaya, Malaysia, 19-20 January 2015.

1.   INTRODUCTION

1.1   Recognizing the need for high capacity major traffic flow routes (MTF) between Southeast Asia and East Asia, and the effect of the current modified single alternate Flight Level Orientation Scheme (FLOS) that caused conflicts with crossing traffic, SAIOACG4/SEACG22 combined meeting decided to establish a South China Sea Major Traffic Review Group (SCS MTFRG) consisting of China, Hong Kong China, Malaysia, the Philippines, Singapore, Viet Nam, IATA, IFATCA and the ICAO RSO. The aim was to review MTF conflicts with specific ATS routes and the overall South China Sea airspace, air route and the suitability of the FLOS to optimize airspace capacity and enhance flight safety in the long term and report outcomes of the review and recommendations to the ATM/SG/2 or SEACG/22 meetings.

1.2   The SCS-MTFRG/1 was attended by 30 participants from 5 States and administrations (Hong Kong-China, Malaysia, Philippines, Singapore, Thailand), and 5 International Organizations (IATA, IFALPA, IFATCA, EU-AATIP, ICAO). The participants were a mix of ATM managers, airspace users and operational officers from the international organizations.

2.   DISCUSSION

2.1   A total of 6 Decisions and 4 Conclusions were reached by the participants of SCS-MTFRG/1, and 4 of them were related to PBN implementation in the SCS area:

2.1.1   **Decision 1/5**- That, considering both Hong Kong and Philippines have agreed to upgrade routes A461 and A583 to RNP10, the APAC RSO is to coordinate with Indonesia and Australia to upgrade those portions of these routes for harmonization and practicality.

In order to meet one of the prime objectives of establishing the SCS-MTFRG, a side meeting between the Philippines, Hong Kong China and IFATCA was held on 20 Jan 2015. The Philippines agreed to the proposal by Hong Kong to re-designate ATS Routes A461 and A583 to RNP10. The parties suggested that further agreements should be sought from Indonesia and Australia in the coming SEACG/22 in order to make the NavSpecs along the entire route uniform.

2.1.2   **Conclusion1/1**- That Hong Kong and Philippines have agreed to upgrade routes A461 and A583 to RNP10 as an immediate measure, to be followed by further upgrades when Philippines' new CNS/ATM capabilities come on-stream. ICAO APAC RSO would provide technical assistance for implementation where necessary, based upon requests from States.

Philippines informed the meeting that their upgraded ATM system has ADS-C / CPDLC capability, and was awaiting for equipment installation and connection to the service provider. The timeline for it to be operable will depend on when the connection and installation works are completed and commissioned. Philippines will update all concerned once everything is in place

2.1.3   **Conclusion1/2**- That the management of the South China Sea (the Main Trunk of South East Asia) must be a collaboration between states to ensure harmonization and consistent application of common procedures and processes

IATA proposed a short and long term strategy for efficiencies in the South China Sea (SCS) airspace. For the SCS airspace in the short term (2015-17) the paper suggests: RNP4 as an interim step to RNP2 to encourage harmonization. In the Longer term (beyond 2017), in accordance with the APAC Seamless ATM plan: SCS airspace should be largely RNP2. There was a need to re-designate the existing routes as RNP2, implement additional parallel routes for M771 and L642. For crossing traffic, IATA suggested the creation of unidirectional parallel routes currently under FLAS to allow access to more optimal flight levels.

2.1.4   **Conclusion1/3**- That the MTFRG looks at reduced horizontal separation, extra level allocation and parallel routes to alleviate the constraints along the identified MTFs.

2.2   Compared to the late 1990's when the current FLAS/FLOS was initially implemented in this region , the PBN concept has been further developed and in recent years implemented extensively. There were now alternative ways of enhancing capacity, among which could be closely spaced PBN routes and the use of a more efficient ATS surveillance-based separation. States were encouraged to consider giving priority to these more efficient NavSpecs, when planning and implementing new route structures.

2.3   ICAO APAC RSO called a side meeting during APANPIRG25 as the pre-meeting of SCS-MTFRG/1. The subject of optimization between Bangkok and Manila was discussed in the side meeting. The side meeting noted that introducing PBN parallel routes between Bangkok and Manila could provide benefits on reducing the conflicts with North East-South West bound MTF in this region. ICAO RSO offered to coordinate with Vietnam and Thailand on the possibility of this implementation. Thailand expressed their willing to start with RNAV5. Thailand also informed the meeting that they already had the concurrence of Cambodia for this implementation and were waiting feedback from Vietnam. This initiative is in line with the IATA proposal to create unidirectional parallel rotes for crossers to optimize level availability.

3. **ACTION BY THE MEETING**

3.1 The meeting is invited to note the information contained in this paper.

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