

International Civil Aviation Organization

Fourteenth meeting of the APANPIRG ATM/AIS/SAR Sub-Group (ATM/AIS/SAR/14)

Bangkok, Thailand, 28 June to 2 July 2004

# Agenda Item 4: Consider problems and make specific recommendations concerning the provision of ATM/AIS/SAR in the Asia/Pacific Region

#### REVIEW OF CURRENT AIR TRAFFIC MANAGEMENT SITUATION OVER THE BAY OF BENGAL AND INDIAN CONTINENTAL AIRSPACE

(Presented by IATA)

# SUMMARY

This paper presents a review of the current air traffic management situation over the Bay of Bengal, Indian Continental airspace and Kabul FIR in the context of long haul flights from South East Asia to Western Europe, following the EMARSSH routes and RVSM implementation.

# 1 INTRODUCTION

1.1 The EMARSSH routes were implemented in the Bay of Bengal area, over continental India and beyond on 28 Nov 2002. A year later, RVSM was implemented 27 November 2003.

1.2 The doubling of levels has certainly led to an overall easing of traffic congestion and the assignment of more economic levels to both over-flying, and Indian domestic traffic. However, in the interest of ensuring a smooth implementation on 27 November 2003 some issues related to longitudinal separation requirements for A466 and N644 at the Pakistan and Afghan border, flight level transition and ATC communications in Yangon FIR, and air traffic management in the Bay of Bengal and the overall optimization of the airspace capacity were not resolved. The meeting should direct its attention to these issues now.

# 2 DISCUSSION

# 2.1 Longitudinal separation for traffic on N644 and A466.

2.1.1 At RVSM TF 20 it was decided that in deference to Pakistan's reservations over possible ATC problems in transitioning aircraft from possibly four RVSM levels (FL280, 300, 320 &340) to only two CVSM levels in Kabul FIR (FL280 was not available and FL310 and FL350 being the only practical levels for most of the long haul aircraft) that the traffic on these two routes would be regarded as being on a single route. A concession was given to traffic out of Indian airports to enter Pakistan FIR at FL280 provided a longitudinal separation of 5 minutes was provided between such traffic and the overflying traffic, and no more than two aircraft out of the total of three, were on the same route. Given that ATS service providers have had more than six months worth of experience

after RVSM implementation they are now well placed to review and relax some of the restrictions along these routes. To ease matters, with FL280 now available in the Kabul FIR, the peak traffic capacity has now increased to 3 flyable levels on each of the two routes making a total capacity of 36 slots per hour, assuming 10 minutes longitudinal separation is applied.

#### 2.2 Level transitions and communications problems over Yangon FIR

2.2.1 Flights over Yangon FIR continue to experience communications problems with Yangon ACC both in the northern and southern segments of the Yangon FIR. The implementation of a procedure for Mandalay Approach to relay for Yangon ACC provided some relief, but the intermittent operation meant that a big percentage of aircraft are not able to communicate with ATC for long stretches while transiting the FIR. This is highly unsatisfactory considering that the flights are required to transition from a non-ICAO Metric to CVSM to RVSM levels in that airspace. Meeting is also informed that the IATA IFBP procedures have been in force in the area since 29 August 2003. This cannot be countenanced for an indefinite period and all avenues must be explored to find a workable solution to ensure the safety of flights in the area. In this regard the best option from a safety perspective is to have direct transition from RVSM to China Metric and vice versa within Kunming FIR where radio communications are assured. Alternatively, the transition directly from metric to RVSM should take place within the Yangon FIR. IATA respectfully requests ICAO assistance in progressing this on an urgent basis.

#### 2.3 Air traffic management

2.3.1 Traffic out of some South East Asian airports continue to suffer lengthy delays frequently. Available statistics indicate that traffic departing Singapore airport still suffer lengthy delays on occasions when traffic is bunched on a single route because of unfavorable winds and weight limitations. In particular delays are significant when flights are bunched on L759. Various measures to avoid such bunching have to date not improved matters much, as airlines have found it operationally possible to flight-plan away from this preferred route only on rare occasions. Further downstream towards Kabul FIR, possible bunching of flights at the entry points could potentially result in re-routings. The 4 hour availability of FL 280 in the Kabul FIR has temporarily eased the situation, by increasing the route capacity by 30 percent. The opening of P628 ASOPO/KANDAHAR route will provide a viable and attractive alternative to L759 and will divert some of the traffic there. To date, ASOPO/ RK is open, and operators anxiously await the opening of RK/Kandahar segment, which will potentially shave off another 60 miles from the total distance, making it a viable alternative to L759. However, ultimately, with the inevitable increase of air traffic, a comprehensive air traffic management plan for the whole of the Bay of Bengal is the only viable long-term solution.

2.3.3 The slots over Kabul can either be managed by the relevant ATS units coordinating the flow among themselves, or through an automated system such as the FAA Dynamic Oceanic Track System (DOTS). Considering the amount of coordination required in order to achieve a proper slot allocation scheme acceptable to both airlines and ATS providers, it is felt that an automated system offers greater chance of success as it is airline regulated. A trial was conducted on 16 April 2004 and preliminary results indicate that such a system could help to reduce some of the inefficiencies in the system and regulate the flow more effectively. As active participation from States is required for the system to work, endorsement from the States is required. If there is agreement among states that a slot allocation scheme is a useful step forward to easing the current traffic flow not just over the Bay of Bengal but also to manage the departing flights out of Indian and Pakistani airports through Kabul FIR, IATA will work to introduce such a system.

2.3.4 There must be no let up in the search for a solution to the problem of departure delays. The ATS providers must accept that as partners in civil aviation they have a vital role to play

in the survival of airlines. Ignoring the problem will not make it go away. This meeting will recall that not so long ago operations over the South China Sea pre-implementation of the South China Sea parallel route structure was plagued with lengthy delays and uneconomic flight levels for years. With the introduction of the route structure and RVSM, the delays and uneconomic levels are a thing of the past. However, it is still not a perfect system but it is capable of yielding more positive results.

#### 2.4 Connecting RK to Kandahar

2.4.1 Much work has gone into extending P628 from ASOPO to RK (Rahimyar Khan) to make this route a viable alternative to the frequently congested L759. IATA is grateful to all who have given their time and effort into making this route a reality. The cooperation from India and Pakistan in this regard deserves special mention. Plans are afoot to make this route even more attractive by linking it from RK to Kandahar direct to V390, thereby shaving 100 nautical miles from its original track distance. Airlines look forward eagerly to its early implementation.

# 3. ACTION BY THE MEETING

3.1 The meeting is invited to note the importance and urgency of issues and work towards resolving them.

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