



ICAO

International Civil Aviation Organization

Tenth Meeting of the Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/10)

Video Teleconference, 04 – 08 May 2020

Agenda Item 4: Review of Current CDM/ATFM Operations and Problem Areas

CROSS-BORDER ATFM MITIGATION

(Presented by ATFM/IR/SWG)

SUMMARY

This paper presents how States worked together to mitigate cross-border ATFM bound for VVDN (Da Nang) by reviewing LOA, increasing airspace capacity, reducing ATFM measures, and introducing Strategic ATFM and Pre-tactical ATFM.

1. INTRODUCTION

1.1 At ATFM/SG/9 held in Bangkok, Thailand from 22-26 April 2019, the Republic of Korea submitted an IP regarding cross-border ATFM bound for VVDN (Da Nang), Vietnam.

<https://www.icao.int/APAC/Meetings/2019%20ATFMMSG9/IP14%20Case%20Study%20on%20ATFM%20Restriction.pdf>

1.2 The ROK received ATFM measures every day for the traffic bound for Da Nang, even though there were not many flights, approximately 14 flights from 1000z-1500z.

Time(Z)/date	2.1(Fri)	2.2(Sat)	2.3(Sun)	2.4(Mon)	2.5(Tue)	2.6(Wed)	2.7(Thu)
1000-1100	-	1	-	-	-	1	-
1100-1200	3	3	2	3	1	3	3
1200-1300	6	7	6	4	3	5	5
1300-1400	3	4	5	4	5	3	5
1400-1500	-	-	-	-	4	1	1
1500-1600	-	-	1	-	-	-	-
total	13	15	14	11	14	13	14

Table 2. Statistical data on the number of flight per hour (based on SOBT)

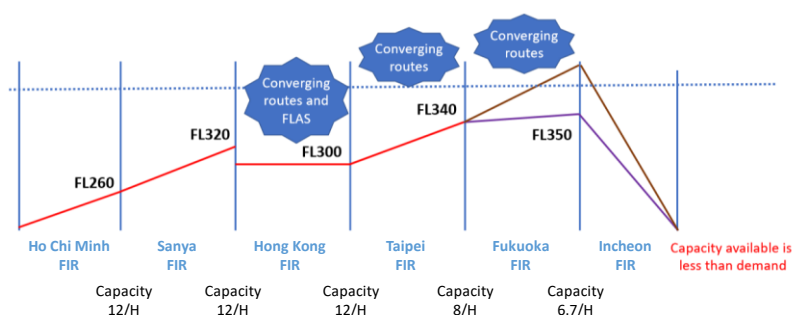
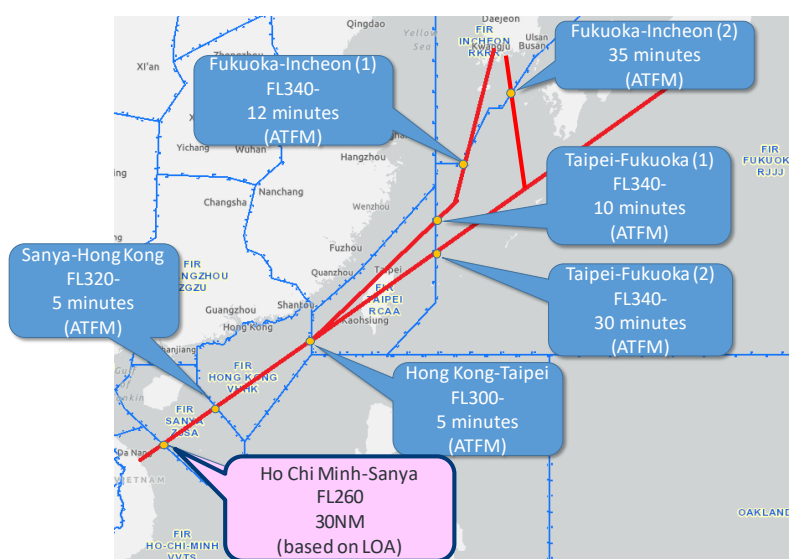
1.3 Thus, the ROK put Ground Delay Program (GDP) and Slot Swapping bound for VVDN (Da Nang) because of the curfew time set by some airports for noise abatement procedure.

2. DISCUSSION

Situation analysis

2.1 After having several offline meetings with related ANSPs, the situation was confirmed as below.

- Ho Chi Minh FIR didn't apply any ATFM measures
- Sanya FIR applied ATFM measures based on the MOU between Ho Chi Minh FIR and Sanya FIR
- Conjunction FIRs added measures to meet their own traffic situation and relay to upstream FIR



Working together

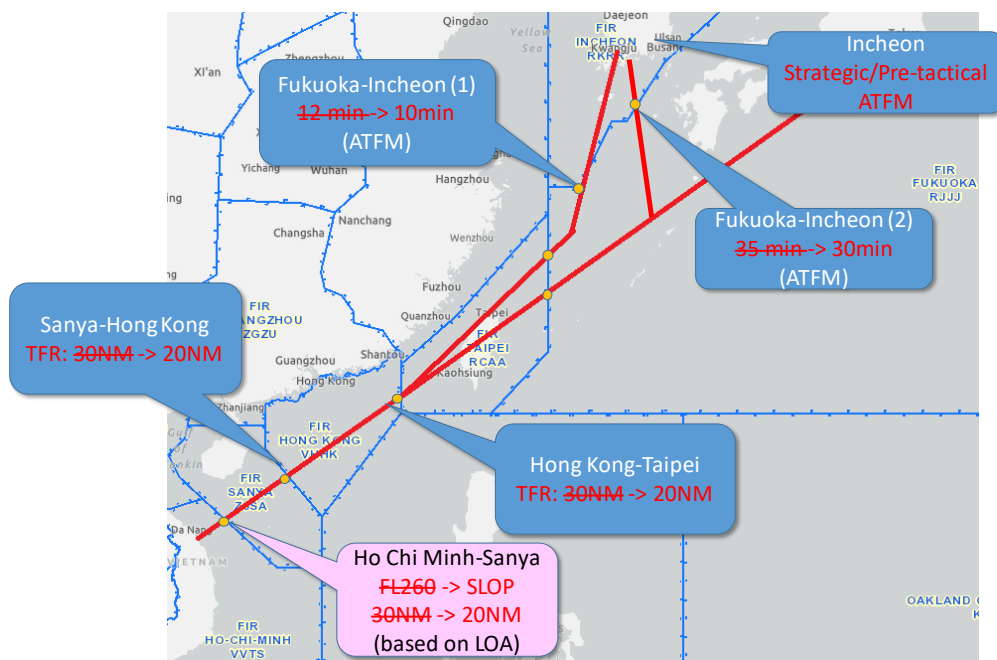
2.2 Related States convinced that, to solve the issue, all States would need work together to mitigate cross-border ATFM bound for Da Nang by doing these initiatives.

- Review LOA
- Increase airspace capacity

- Reduce ATFM measures
- Introduce Strategic ATFM and Pre-tactical ATFM

2.3 Each ANSP (FIR) has done at least one initiative to mitigate the ATFM, each step might be small but it must be a revolution as a whole. Their efforts are shown on the table below.

FIR	Approach	Previously	Currently	When
Ho Chi Minh FIR Sanya FIR	Increase capacity	FL260 restriction	No longer exists (SLOP remains the same)	Nov 2019
	Increase capacity	30NM transfer	20NM transfer	Mar 2020
Sanya FIR Hong Kong FIR	Increase capacity	30NM transfer	20NM transfer	Mar 2020
Hong Kong FIR Taipei FIR	Increase capacity	30NM transfer	20NM transfer	Mar 2020
Hong Kong FIR	Reduce ATFM measures	-	Communicate with Taipei FIR for better daily ATFM operations	On going
Fukuoka FIR	Reduce ATFM measures	(1) 12min FL340- (2) 35min	(1) 10min FL340- (2) 30min	Nov 2019
Incheon FIR	Implement ATFM	AIP publish for ATFM Tactical ATFM(CTOT)	Strategic/Pre-tactical/Tactical ATFM (CTOT, slot swapping, Reroute, etc.)	Mar 2020 (Jun 2019)



Conclusion

2.4 We haven't seen actual traffic flow with new initiatives due to COVID-19 outbreak, but every State's effort must have resolved ATFM delays bound for Da Nang. Moreover, as positive side effect, other ATFM measures may be reduced due to air space capacity increase. It is important to analyze the traffic flow carefully to check;

- any negative impact
- whether adequate ATC workload or not.

2.5 States realized that, through this working arrangement, ensuring sufficient preparation time for ATFM measures affecting multiple FIRs is essential by mutual effort and cooperation are necessary among all relevant States (CAAs and ANSPs). In addition, as stated on Asia Pacific Framework for Collaborative ATFM, it was reaffirmed that increased capacity is the primary and central method for managing increasing demand. Furthermore, it is important to have a common understanding that putting excessive ATFM measures makes adjacent FIR's ATC workload increase drastically. And it is also important to develop constant demand and capacity monitoring/analysis capability for earlier ATFM planning and ATFM measure consideration.

3. ACTION BY THE MEETING

The meeting is invited to:

- a) note the information contained in this paper;
- b) realize the importance of working together to mitigate cross-border ATFM;
- c) reaffirm increased capacity is the primary and central method for managing increasing demand; and
- d) discuss any relevant matters as appropriate.

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