

# ATM Multi-Nodal Network Flow Coordination

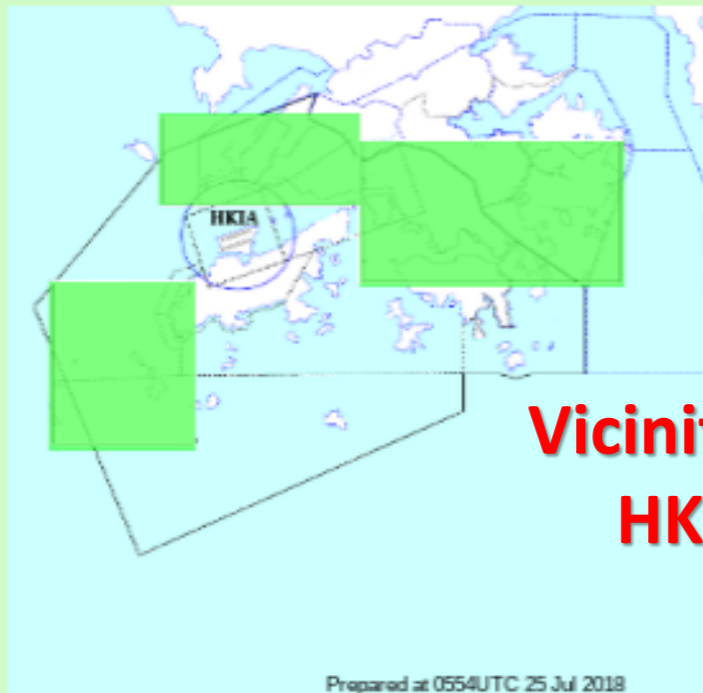


# Collaborative Decision Making

# Significant Convection Monitoring and Forecast

Forecast valid from 06 UTC 25 Jul 2018 to 18 UTC 25 Jul 2018

05:54 - 06:54 UTC



Forecast for HKIA

UTC	07	08	09	10	11	12	13	14	15
Overall	[Green]								
07 Headwind	[Green]								
25 Headwind	[Green]								
Crosswind	[Green]								
Visibility	[Green]								
Ceiling	[Green]								

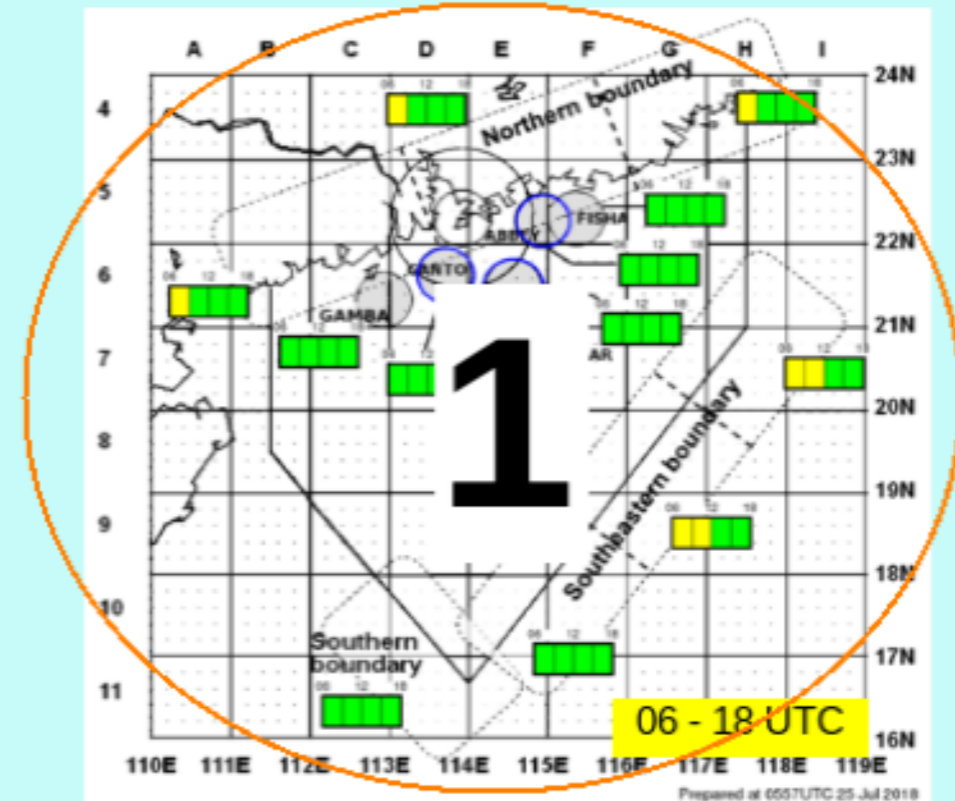
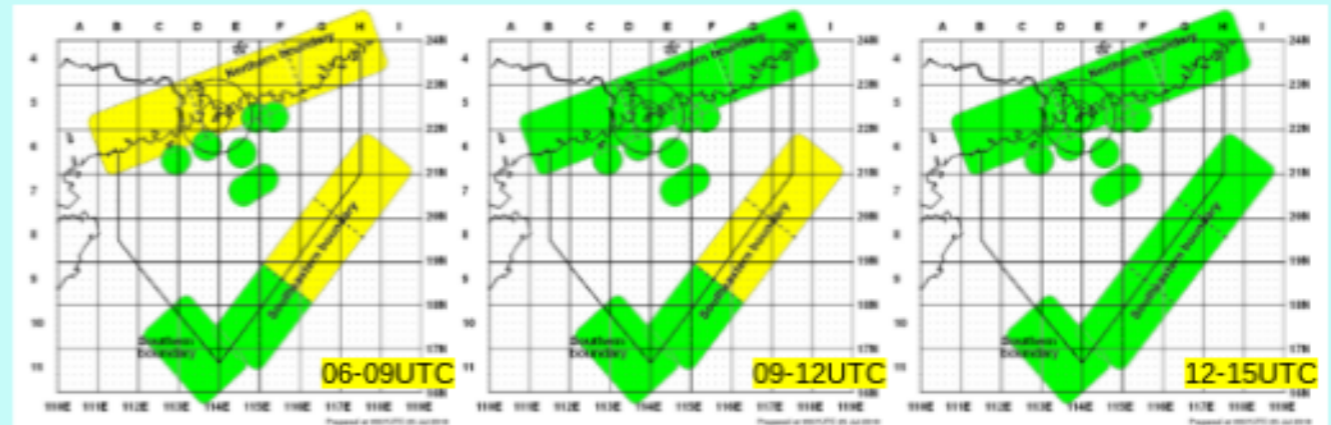
Prepared at 0602UTC 25 Jul 2018

TS/CB forecast for adjacent areas

UTC	06-07	07-08	08-09	09-12
20nm of ARP	[Green]			
ABBEY	[Green]			
BETTY	[Green]			
CANTO	[Green]			

Prepared at 2157UTC

Within  
20 NM  
& HPs



FIR

CAPACITY RELATED INFORMATION VHHH (FOR ARRIVALS)

VALID: 250800 to 251600 UTC

CAPACITY LEVEL: 1

AIRPORT ACCEPTANCE RATE: 33 flights per hour

EXPECTED DELAY: Up to 15 mins

REASON: -

ADP

Notes

3 Times Daily MET Webcon

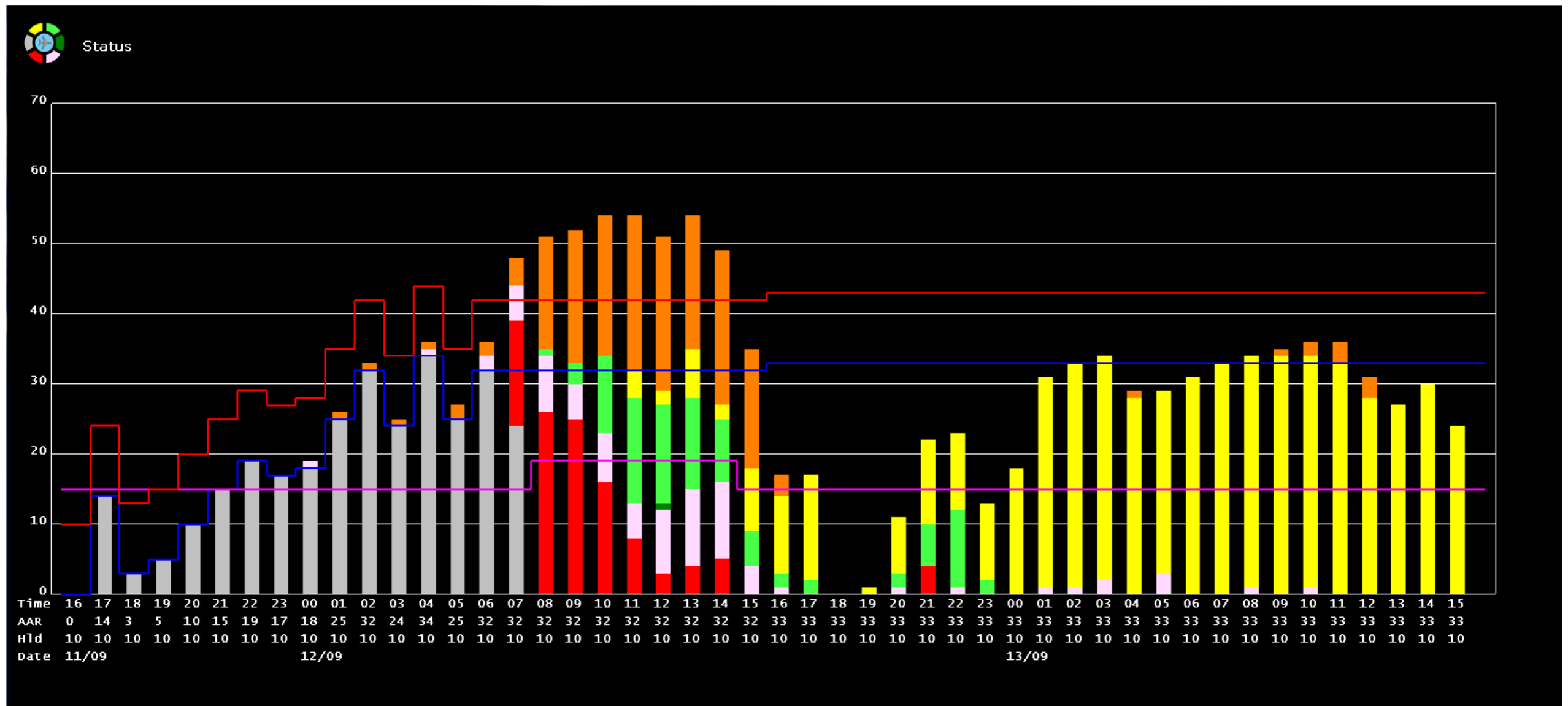
# Airport Acceptance Rate (AAR) Calculator

Capacity Notification					
Expected Runway	07				
FACILITIES					
Runway Availability	<input checked="" type="radio"/> Dual <input type="radio"/> Single (Rwy Maint) <input type="radio"/> Single (Day)				
Approach	<input checked="" type="radio"/> ILS/RNAV <input type="radio"/> VOR				
WEATHER					
	DIR	SPD	X/W	H/W	Note:if SFC wind > 20kts, Enter 1000' wind
WIND	070	5	0	5	
VIS/RVR(m)	5000				
CLOUD CEILING (BKN+)	3000				
TS/CB in 20NM?	<input checked="" type="radio"/> Nil/Green <input type="radio"/> Yellow <input type="radio"/> Red <input checked="" type="radio"/> Isolated <input type="radio"/> Broken <input type="radio"/> Extended TS				
Available Arrival Feeds	<input checked="" type="radio"/> 3 <input type="radio"/> 2 <input type="radio"/> 1 <input type="radio"/> 0				
OTHER FACTORS					
Additional Spacing (WX/AWK?)	0				
RESULTS					
Mode of Operation					
Final Spacing	NM				
Final Speed	kts				
Airport Acceptance Rate					
Capacity Level					
Expected Delay					
Critical Factors					
Remarks					

**Calculate**

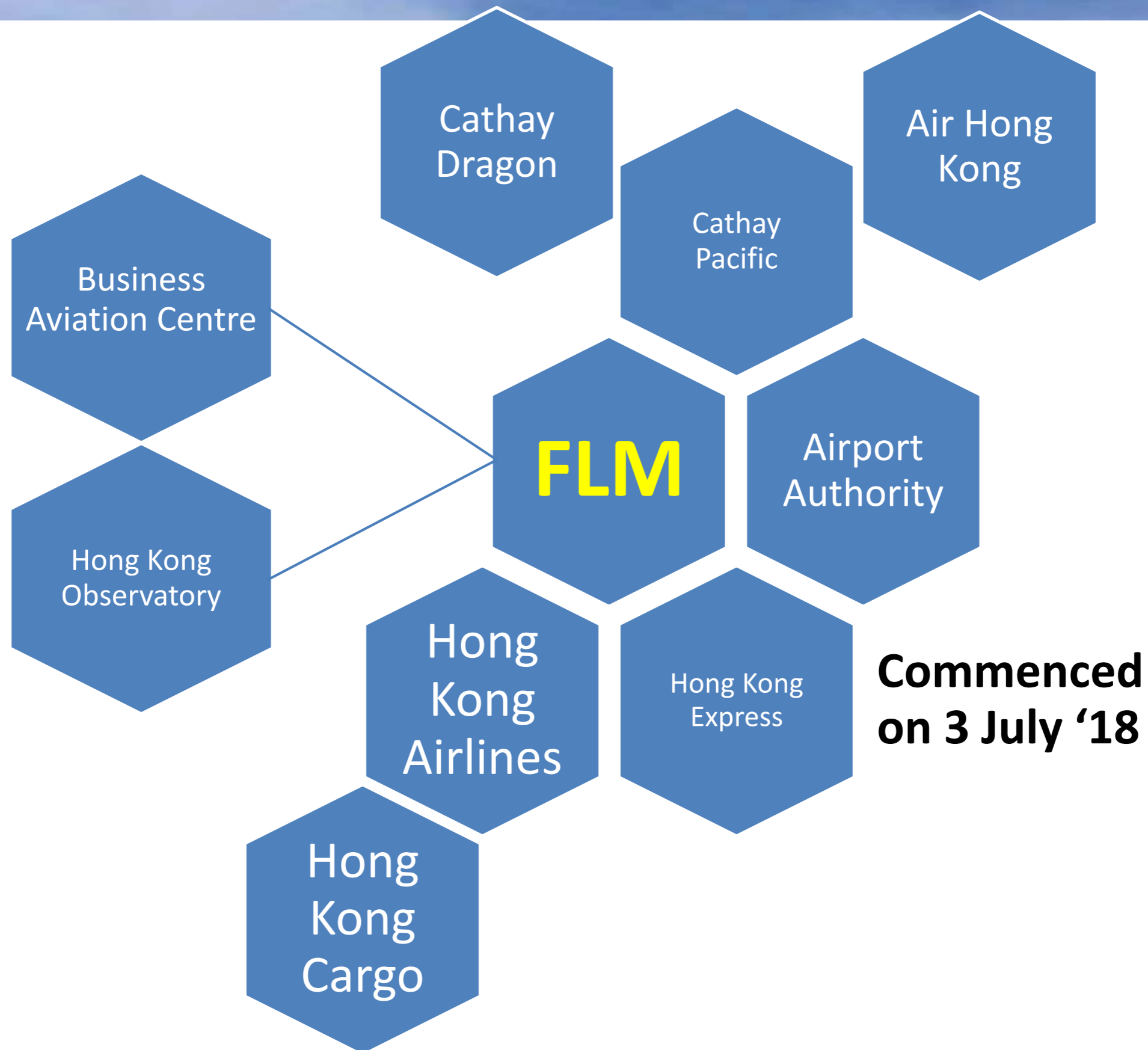
# Demand/Capacity Assessment

- Runway capacity + max airborne delay exceeded = ATFM Measures





# ATC Operational Plan Web Conference



# Regional ATFMU Web Conferencing

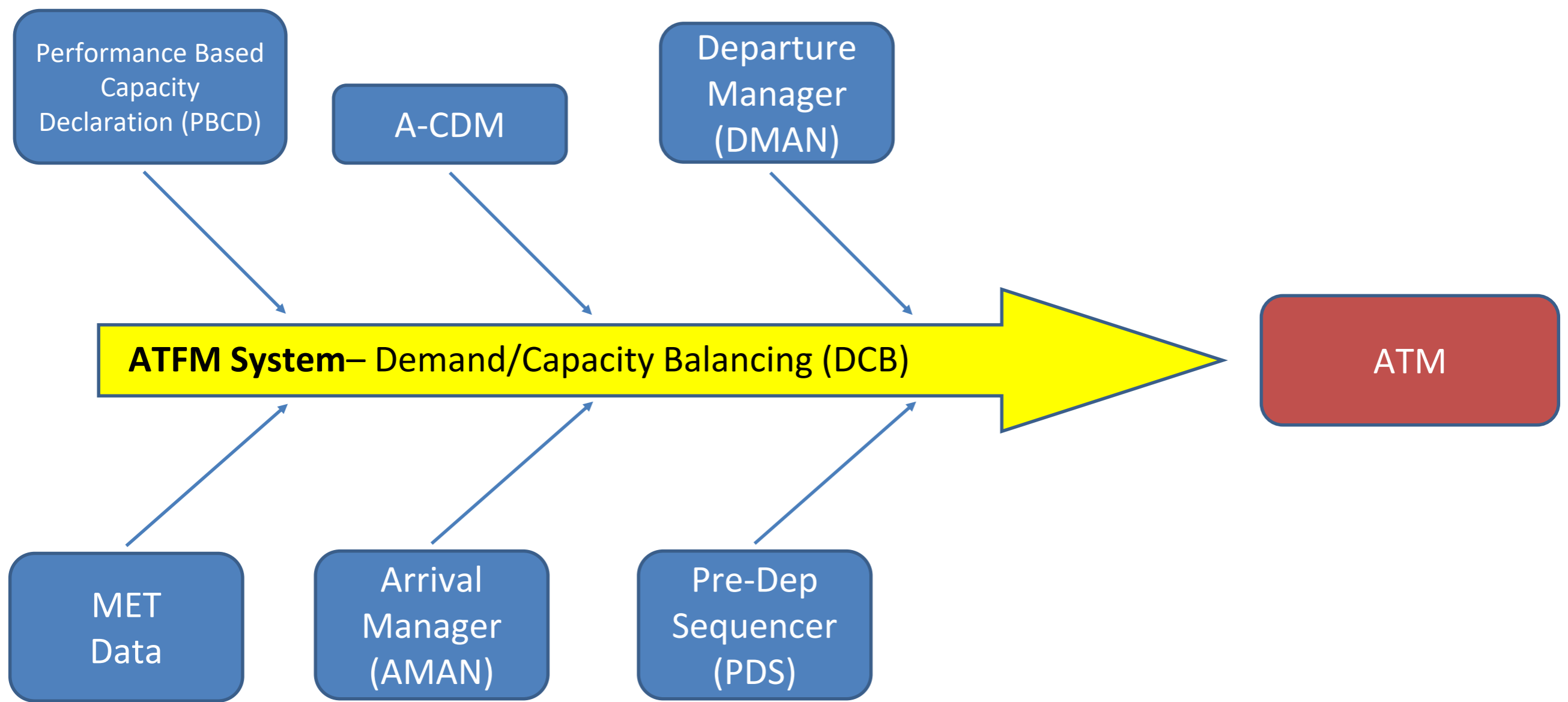
- Weekly Core Group web conference
  - With AEROTHAI, CAAS, CATS, ATMB (GZH/Sanya) etc/ (MN Level 3)
- Discuss longer term impact events i.e. 2-5 days
- Conducted from Strategic Flow Management Center

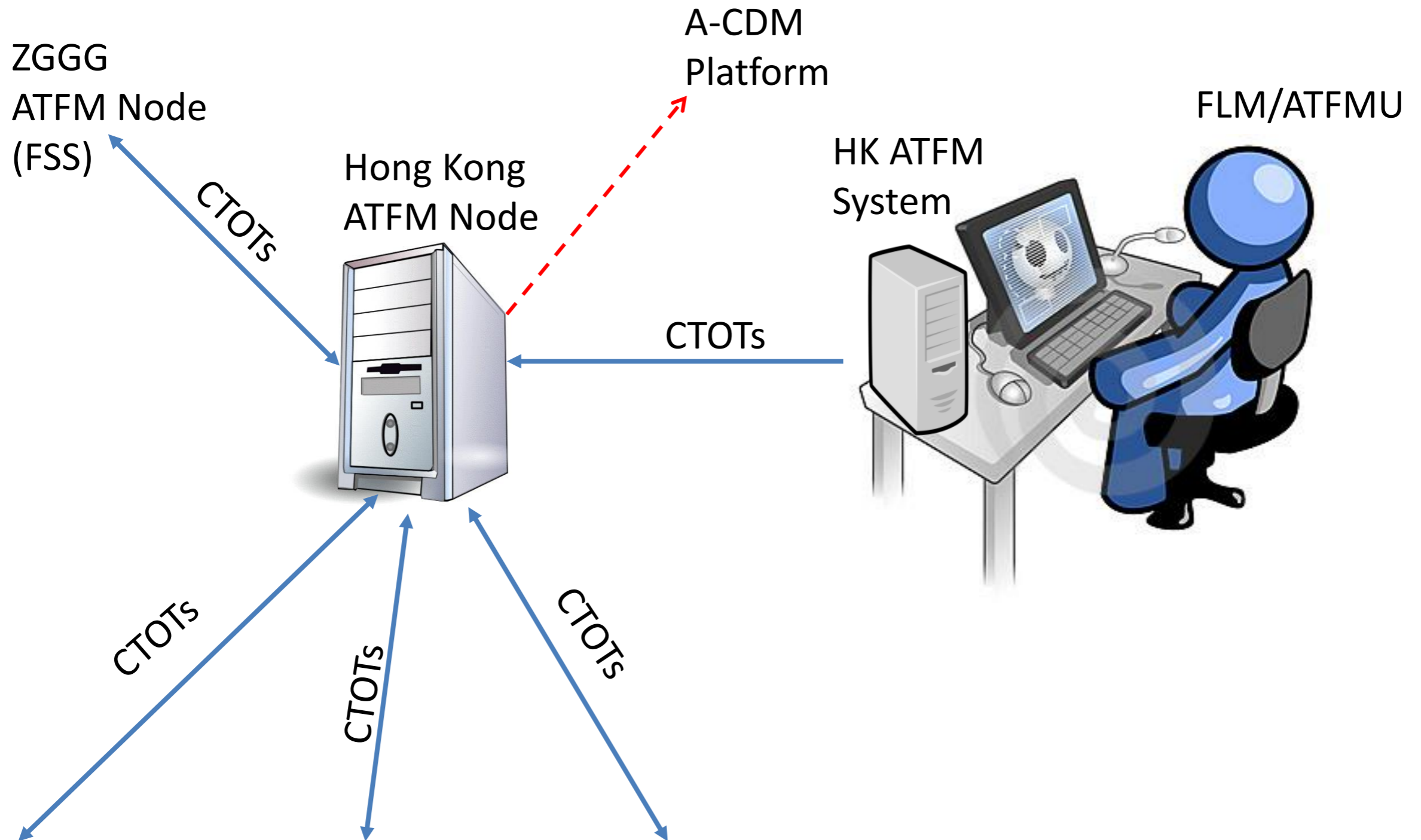


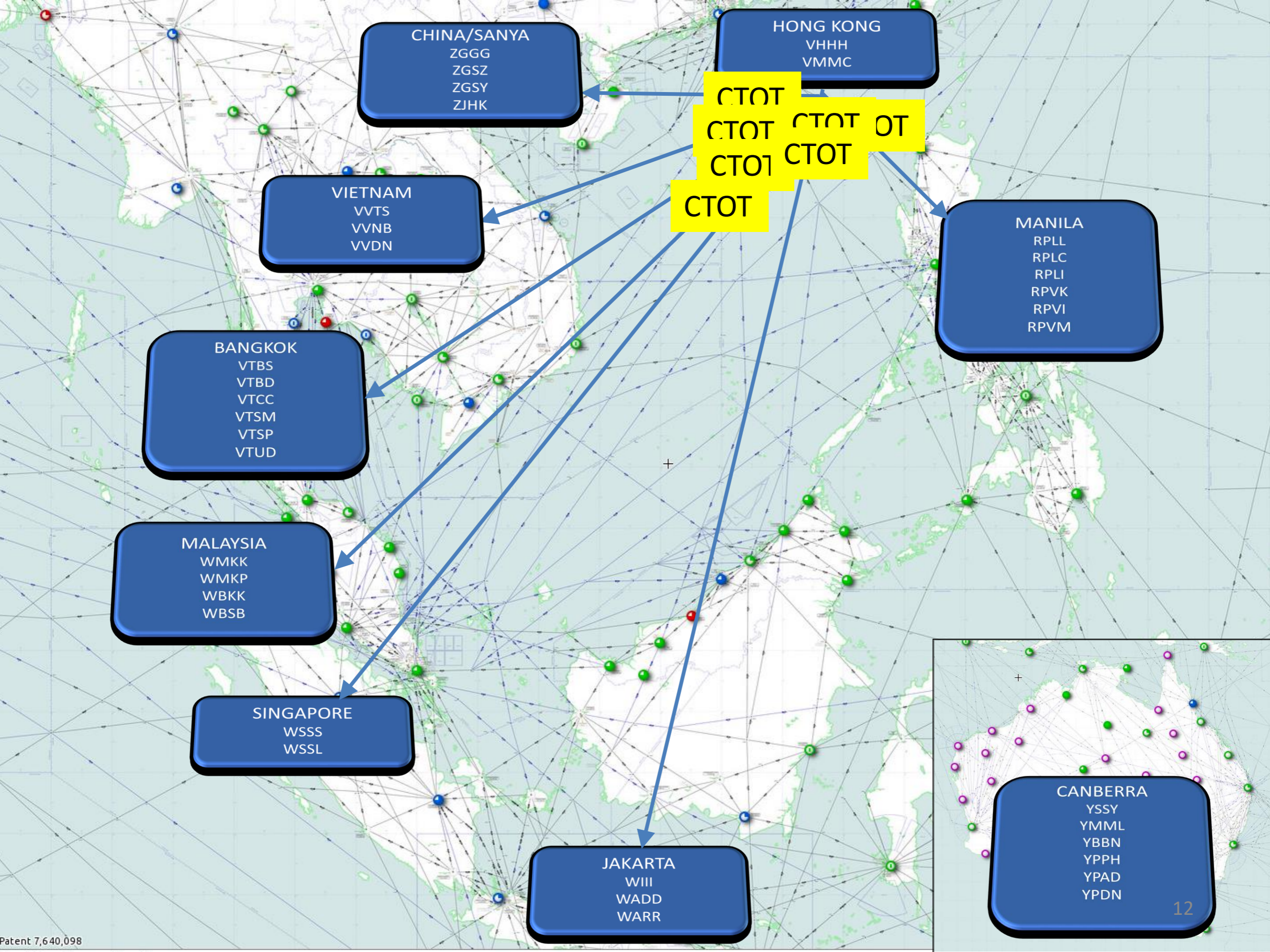
# APAC ATFM NETWORK

# ATFM System: The Backbone of ATM

- Data from multiple systems can enhance the demand/capacity balancing process. The ATFM system is the appropriate location for data integration and network sharing







CHINA/SANYA  
ZGGG  
ZGSZ  
ZGSY  
ZJHK

HONG KONG  
VHHH  
VMMC

CTOT  
CTOT CTOT OT  
CT01 CTOT

VIETNAM  
VVTS  
VVNB  
VVDN

MANILA  
RPLL  
RPLC  
RPLI  
RPVK  
RPVI  
RPVM

BANGKOK  
VTBS  
VTBD  
VTCC  
VTSM  
VTSP  
VTUD

MALAYSIA  
WMKK  
WMKP  
WBKK  
WBSB

SINGAPORE  
WSSS  
WSSL

JAKARTA  
WIII  
WADD  
WARR

CANBERRA  
YSSY  
YMML  
YBBN  
YPPH  
YPAD  
YPDN

# APAC ATFM Network

- Still very much WIP
- Some ANSPs using dedicated web portals, some via AFTN messaging, some still relying on Email
- Prospect of a proliferation of discrete web portals creates problems for Airspace Users
- No direct system to system interoperability at this stage
- Interim: Adapting existing AFTN Network messages –SAM/SRM/SLC

# ATFM/IR/SWG

- Under ICAO ATFM/SG
- Task: Draft a tech requirement roadmap and Interface Control Document (ICD) for system to system linkage
- Web-based solution for exchange of ATFM information
- Eventually, ATFM data exchange will be supported by FIXM on SWIM-based technology

# ATFM/IR/SWG

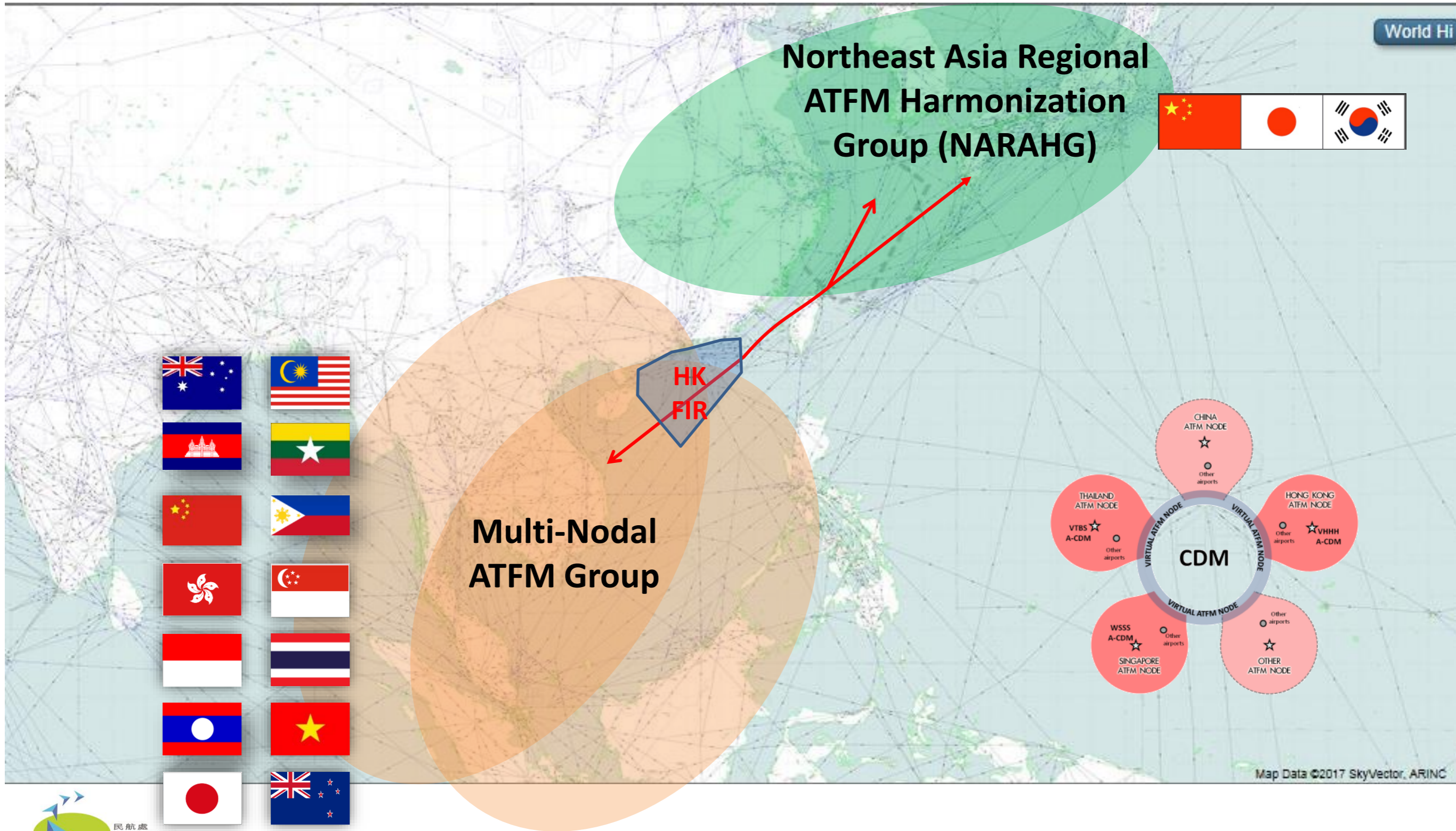
- Development of Operational scenarios
- Common Min. User Interface requirements
  - Flight Creation
  - Flight Update
  - CTOT Distribution and Cancellation
  - CTOT Management
  - ATFM Measure Plan and Activation
- End-State system to system interface (ICD)

# FIXM 4.1 Extension

Estimated	Calculated	Actual	Applicable
EOBT	COBT	AOBT	Terminal Gate
ETOT	CTOT	ATOT	Departure Runway
ETO	CTO	ATO	RFIX or AFIX
ELDT	CLDT	ALDT	Arrival Runway



# ATFM Network Trial Groups



# Common Regional Overview

Welcome, airline.

Home

Login

Reset password

**MULTI-NODAL ATFM NETWORK**

**Hong Kong ATFMU**

Country / City: -- select an option -- Airport: -- select an option --

**VTBS GDP**

Weather Station VTBS CHON BURI/SATTAH (19m ago)  
VTBS 090530Z 13005KT 070V170 9999 VCSH FEW020CB SCT035 32/24 Q1009 NOSIG  
TAF VTBS 090500Z 0908/1012 09005KT 9999 FEW025  
BECMG 0908/0910 13008KT  
TEMPO 0912/0918 VRB15KT 5000 TSRA FEW018CB SCT030 BKN100  
BECMG 0918/0920 08005KT  
TEMPO 1008/1012 VRB15KT 5000 TSRA FEW018CB SCT035

Contact Us  
Email: [hkatfmu@cad.gov.hk](mailto:hkatfmu@cad.gov.hk)  
Phone: +852 2910 6275

100%

Thanks!

Questions?