

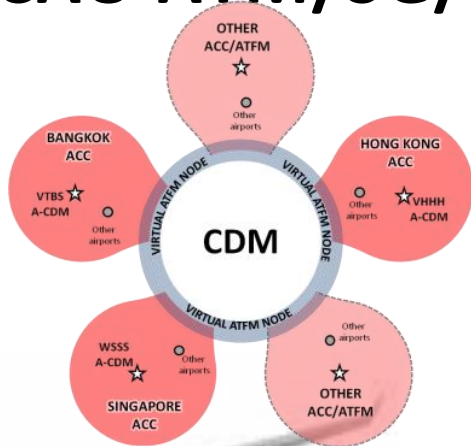


Cross-Border

ATFM Operational Trial



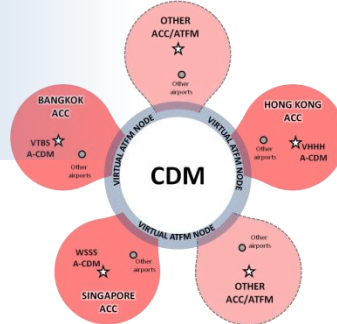
Third Meeting of
ICAO ATM Sub-Group of APANPIRG
ICAO ATM/SG/3



3 – 7 August 2015
Bangkok, Thailand



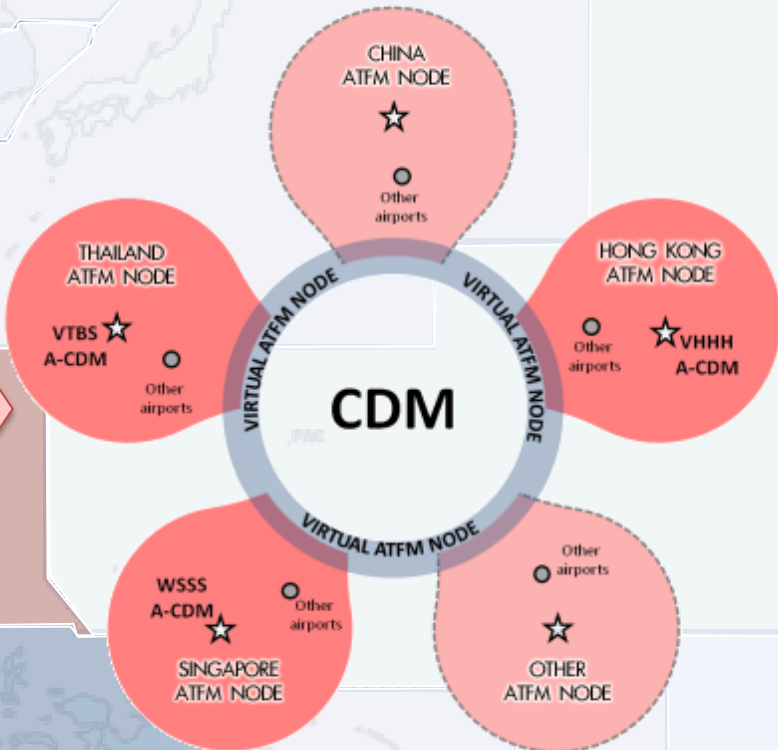
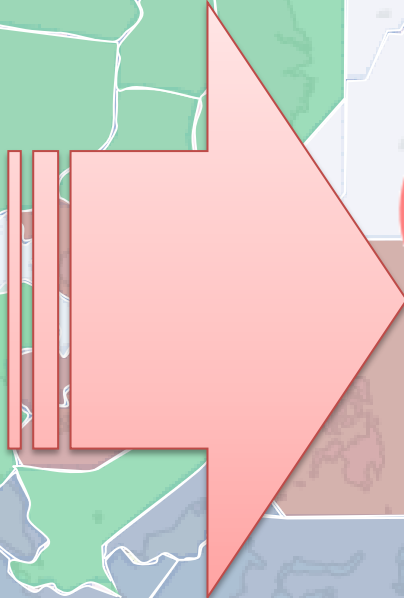
Asia-Pacific ATFM Landscape



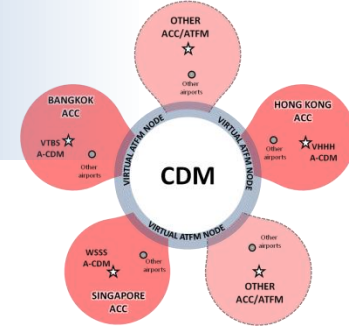
**Domestic
ATFM** ✓

**Cross-Border
ATFM** ?

**Regional
Central ATFM
Unit** ?



ATFM Operational Trial: Phased Approach



Phase 1 2015 - 2016

- Distributed Ground Delay Program
 - Airport Arrival Constraints (short-term & medium-term) e.g. weather, runway outage

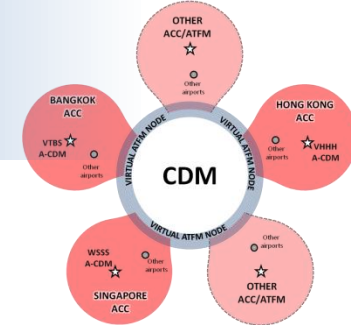
Phase 2

- Ground Delay Program supporting Airspace Congestion & Capacity Planning
- Explore interconnectivity among ATFM systems

Phase X Vision

- Fully interconnected Global ATFM Service
- Integration with SWIM and 4D-Trajectory Management

ATFM Operational Trial: Phase 1



Stage 1
(Jun – Sep 2015)
Goals: CTOT communication.
Engage in ATFM information
flow process)

Stage 2
(Oct 2015 – Jan 2016)
Goals: CTOT Adherence. Start
Post-Analysis preparation and
Compliance Measurements.

Stage 3
(Feb – Jun 2016)
Goals: CTOT Revision –
cancellation and
improvements.

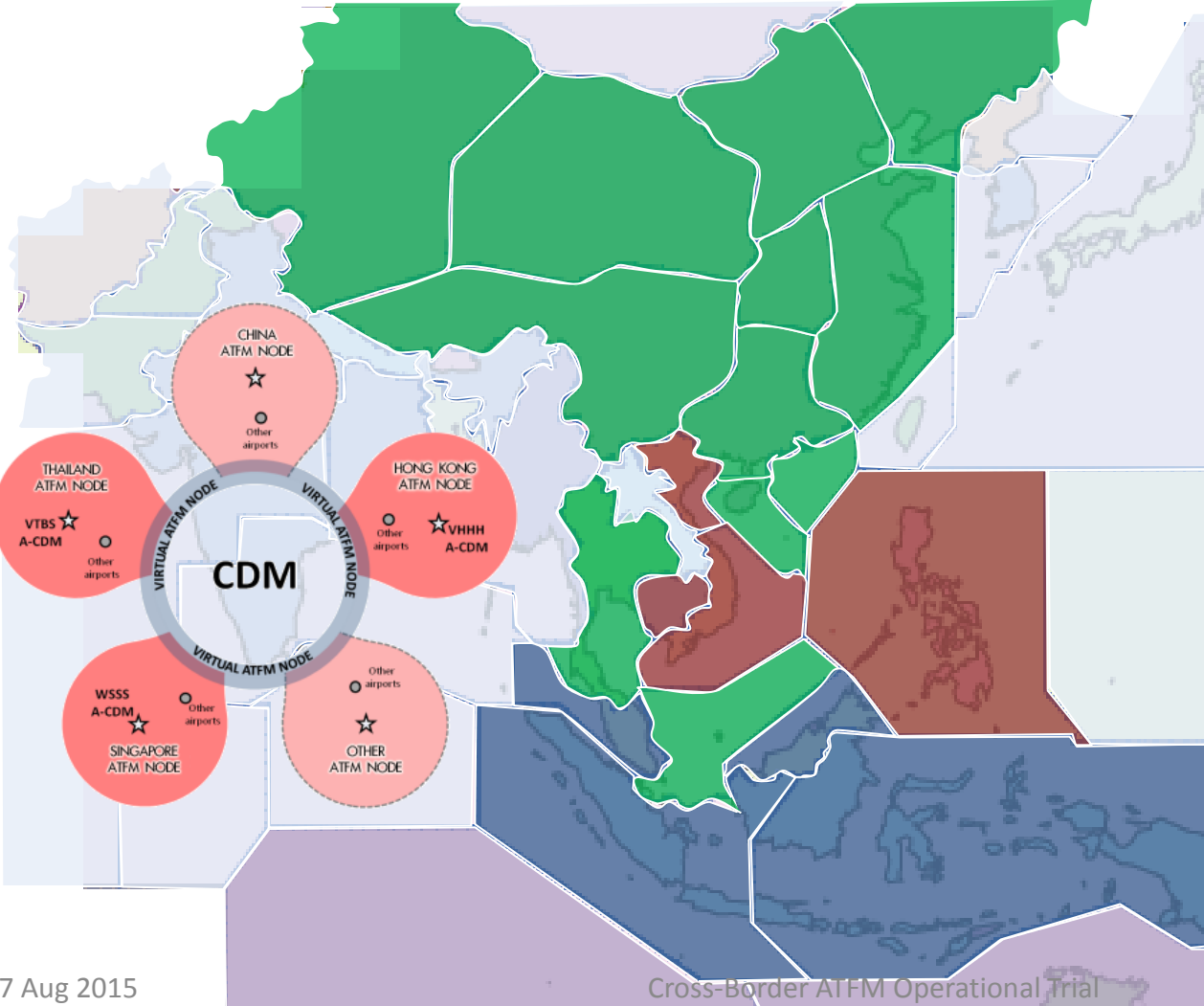
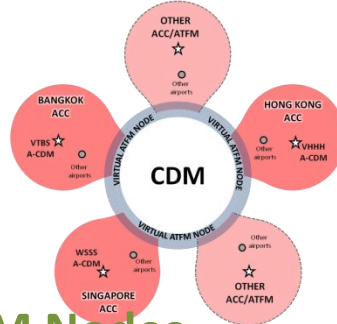
Jun
2015

Jun
2016

Phase 1

- Goals:
- 1) Establish Cross-border ATFM/CDM Framework
 - 2) Regulated Traffic Flow into airports (Demand/ Capacity Balancing)
 - 3) Predictability in operation
 - 4) Reduction in airborne holdings

Distributed Multi-Nodal ATFM Operational Trial Participation Model



Level 3 ATFM Nodes

Generate, Distribute, Comply to CTOT

- China
- Hong Kong China
- Singapore
- Thailand

Level 2 ATFM Nodes

Receive and Comply to CTOT

- Indonesia - 24 Aug 2015
- Malaysia

Level 1 ATFM Nodes

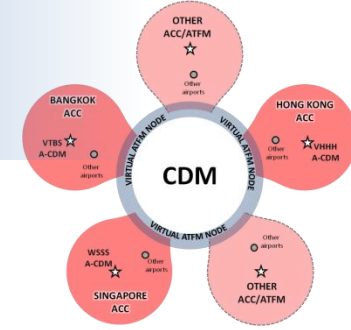
Observers

- Cambodia
- Philippines
- Viet Nam

Advisory ATFM Node

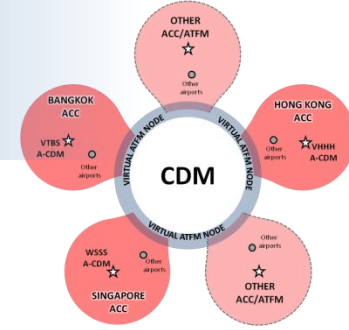
- Australia

ATFM Ops Trial Phase 1 Stage 1



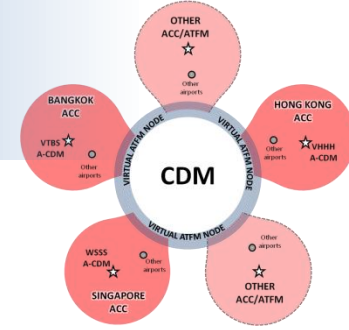
Week Starting	Activity
29 Jun 2015	Test Communications and Conferencing Framework
6 Jul 2015	Familiarization with Web-Portal for CTOT Delivery
13 Jul 2015	FPL Submission (3hrs before EOBT) ICAO Message Handling
20 Jul 2015	Monitor effectiveness of demand prediction
27 Jul 2015	Mid-Trial Operational Trial Review
3 Aug 2015	Determine Airport Acceptance Rate (AAR) from inputs
10 Aug 2015	ATFM Daily Plans (ADPs)
17 Aug 2015	Use of ATFM Tool to Model CTOT; Transmit and receive CTOT
24 Aug 2015	Simulate multiple ATFM Measures
31 Aug 2015	End-of-Stage 1 Operational Trial Review
7 Sep 2015	Preparation for Stage 2
15-16 Sep 2015	Multi-Nodal ATFM Ops Trial Project Meeting (Multi-Nodal/7)

Lessons Learned ...



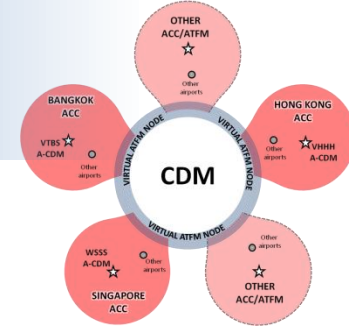
- Efficient and well-defined communications framework
 - Project and Ops Points of Contact
 - Dissemination of Alerts and Acknowledgements
 - Web Portal + E-Mail notification
 - Optional CTOT delivery via AFTN / Slot Allocation Msg
- Flight Plan filing requirements
 - FPL submission 3 hours before EOBT
 - Submission of CHG/DLA message when EOBT diverge by more than 15 minutes
 - Prompt submission of CNL

Aeronautical MET for ATFM Ops



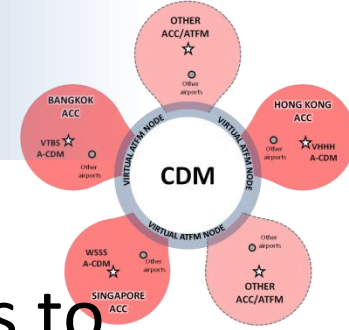
- Accurate capacity determination and adjustments key for effective ATFM
- Accurate weather forecast and predictions are necessary
- Need for close working relationship between ATM and MET

Next Steps



- Cross-Border ATFM Ops Trial set stage for harmonized regional cross-border ATFM
- Crucial step for eventual implementation of ATFM
- States should come together to work out implementation plan for ATFM in the Asia-Pacific region in line with Seamless ATM Plan and ASBU

Actions by the Meeting



- Note information presented in the paper
- urge for continued support by all stakeholders to commit resources and collaborate to the success of the ATFM Operational Trial
- acknowledge the importance of engaging the MET community to develop tailored products to support ATFM
- consider the next step towards ATFM implementation in the region in-line with the Seamless ATM Plan and the ASBU methodology; and
- discuss any relevant matters as appropriate.

Questions & Discussions

