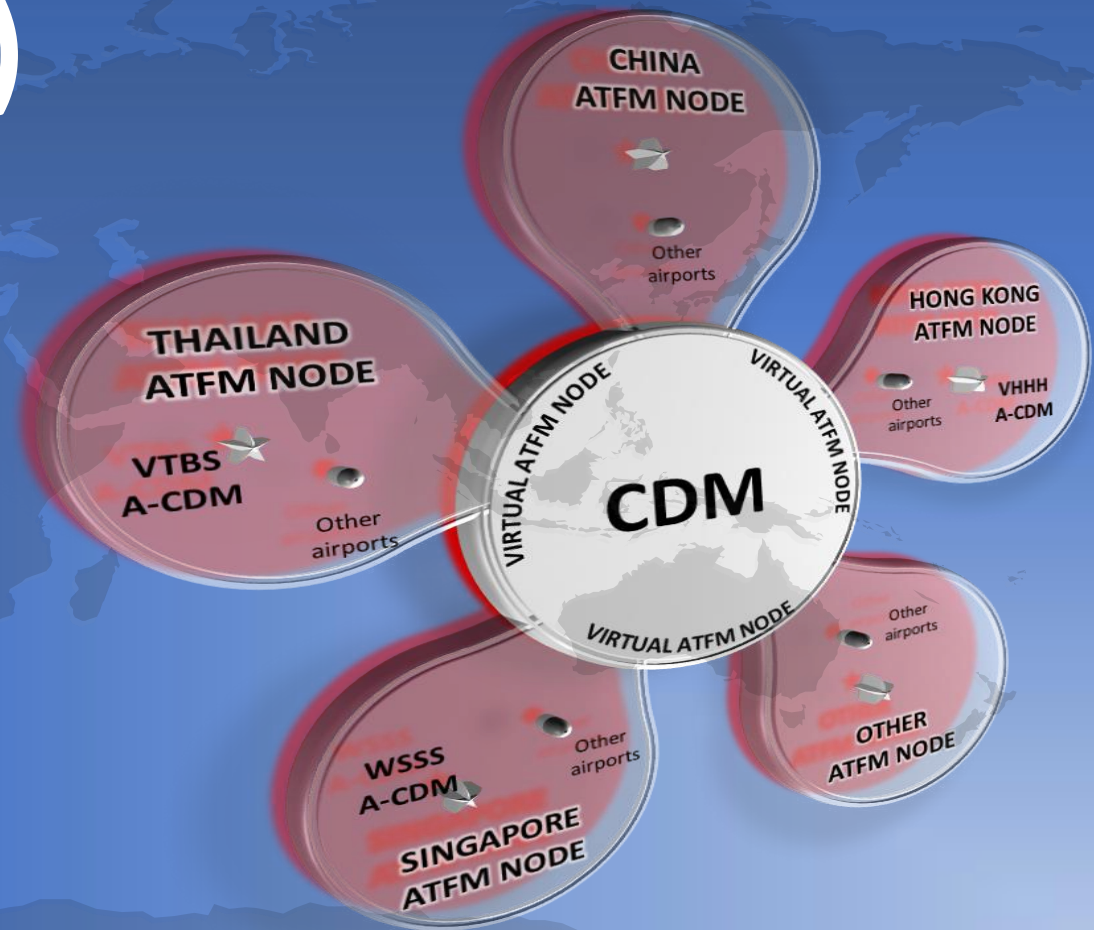


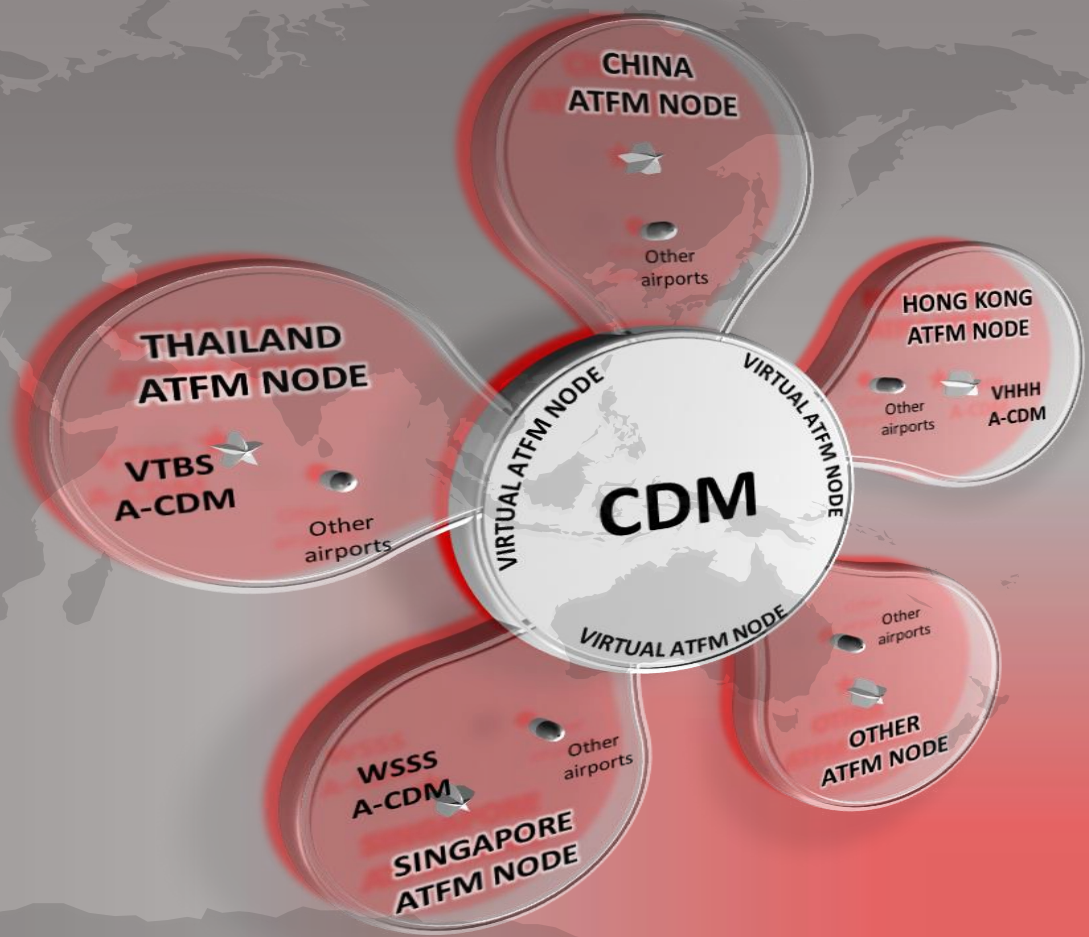
APAC Cross-Border Multi-Nodal ATFM Collaboration (AMNAC) *Progress Update*



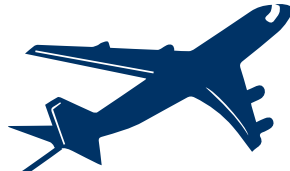
ATFM/SG/11

2 – 6 August 2021

Operational Progress Updates



Where We Are



800+

**Rounds of distributed
ATFM programs
activated**

18+

Project meetings

11

**ANSPs participating in the project
(+ Airservices Australia in the beginning)**

5+

**Years since the start
of operational trial
(2015 – Today)**



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Where We Are

Tiered Level	Capabilities & Members
Level 3	<ul style="list-style-type: none">▪ Able to generate, deliver, and receive CTOTs;▪ Able to comply with CTOTs from all Level-3 ATFM Nodes <p><i>Current members:</i></p> <ul style="list-style-type: none">▪ Cambodia, China, Hong Kong China, Singapore, Thailand
Level 2	<ul style="list-style-type: none">▪ Able to comply with CTOTs from all Level-3 ATFM Nodes <p><i>Current members:</i></p> <ul style="list-style-type: none">▪ Indonesia, Malaysia, Myanmar, the Philippines, Viet Nam
Level 1	<ul style="list-style-type: none">▪ Observe and participate in the project progress <p><i>Current members:</i></p> <ul style="list-style-type: none">▪ Lao PDR

+ Occasional participation from Japan and Republic of Korea as meeting observers



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Network Post-Operations Analysis

	Bangkok	Hong Kong	Phnom Penh	Sanya	Singapore
Impacted Flights	40,965	265	954	30,035	1,108
# of ATFM Days	448	13	47	451	25
Total Assigned ATFM Delay	365,056	1,606	4,830	111,835	18,867
Average Assigned ATFM Delay	8.91	6.06	5.06	3.72	17.03

(Data from January 2019 onward)

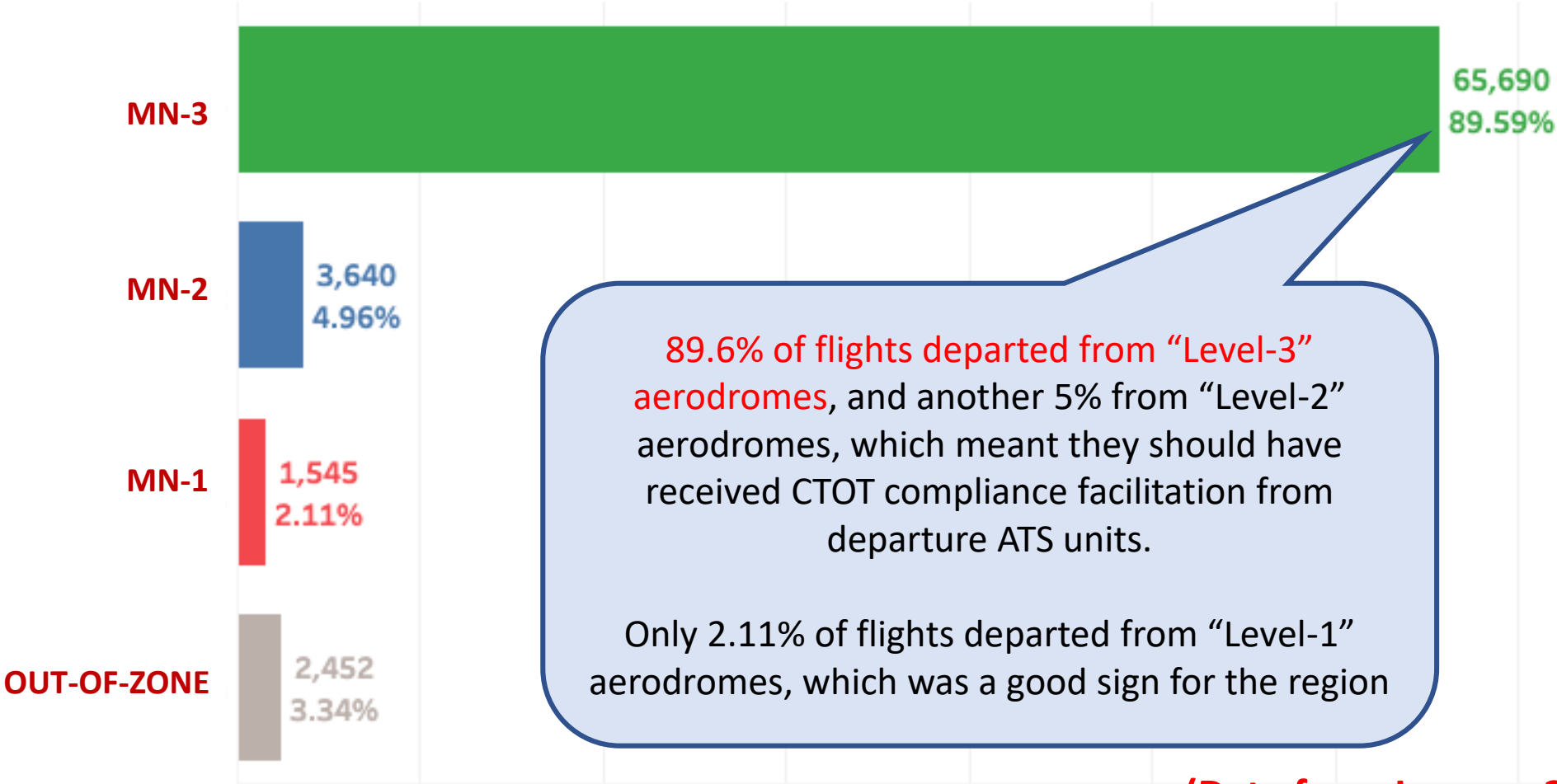


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Network Post-Operations Analysis

Flight Count by ADEP Levels (Initiating ATFMU: All)



89.6% of flights departed from “Level-3” aerodromes, and another 5% from “Level-2” aerodromes, which meant they should have received CTOT compliance facilitation from departure ATS units.

Only 2.11% of flights departed from “Level-1” aerodromes, which was a good sign for the region

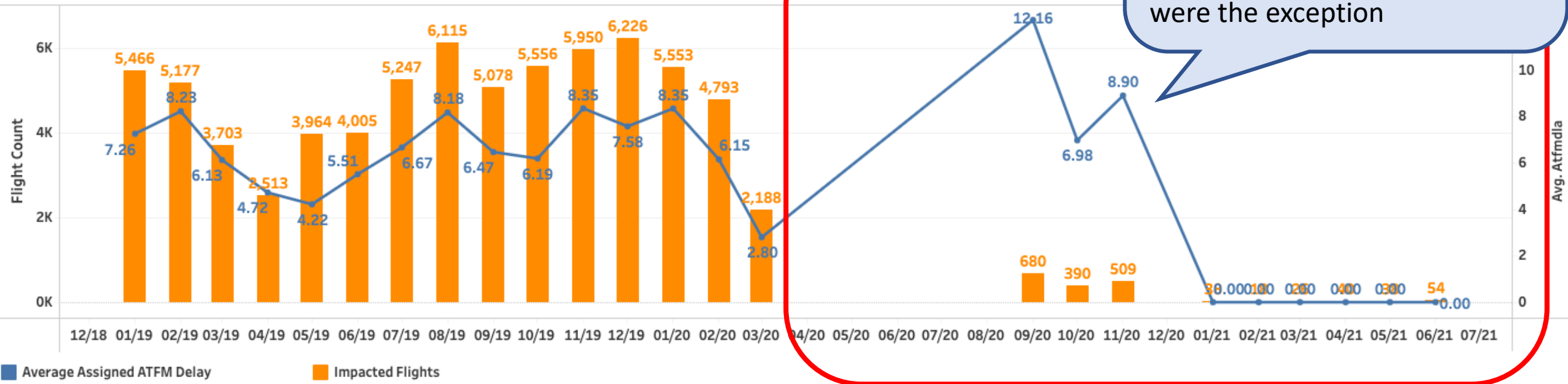
(Data from January 2019 onward)



Network Post-Operations Analysis

COVID-19 made it a quiet year, with traffic downturn and lack of needs for ATFM measure.
 Thailand & Hong Kong China were the exception

Flight Count & Average ATFM Delay (Initiating ATFMU: All)



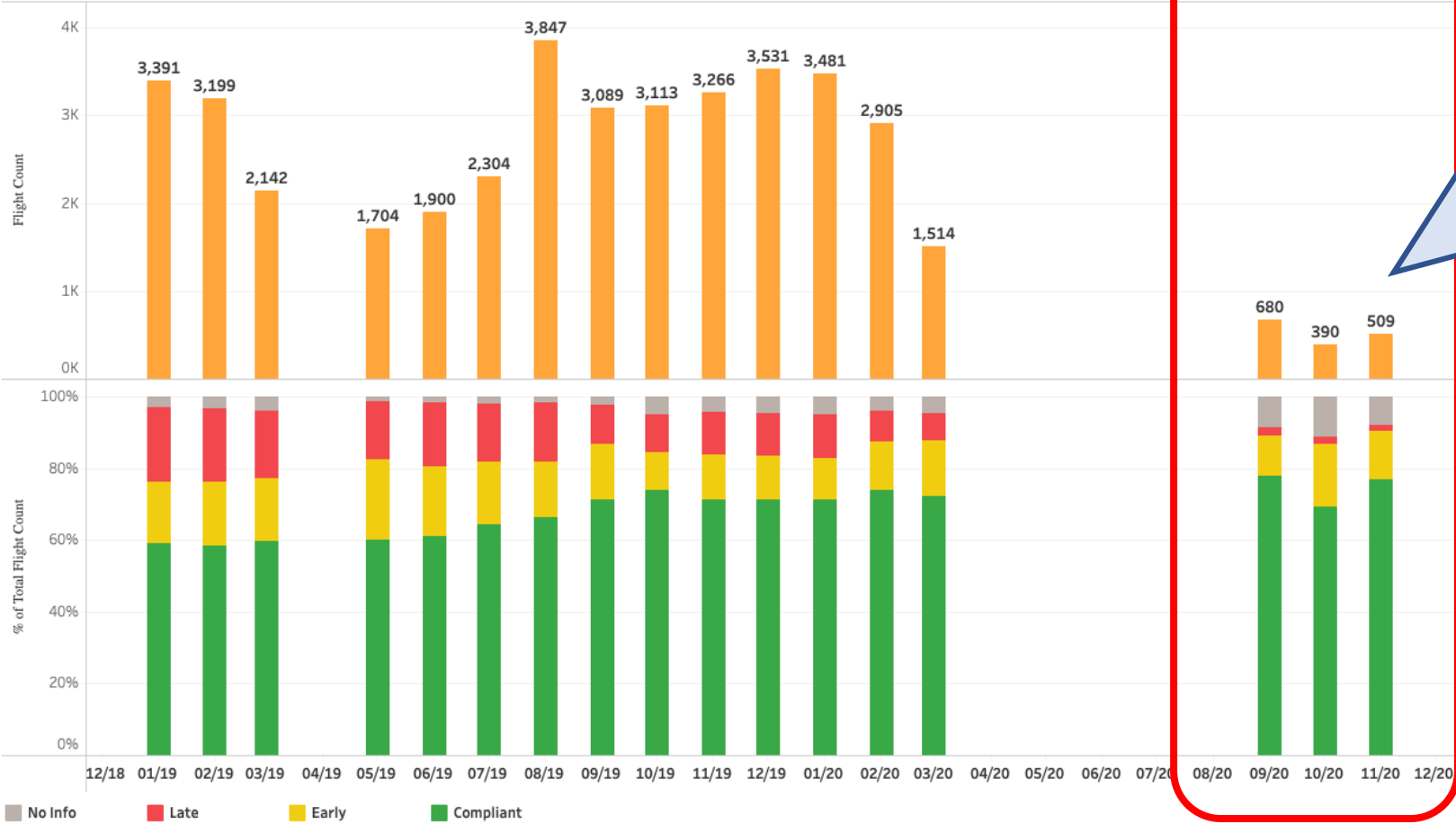
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Network Post-Operations Analysis

Filtered Departure CTOT Compliance

Initiating ATFMU: Bangkok
 Airline: All
 Departure Country & Airport: All / All



Thailand activated some GDPs in late-2020 for RWY/TWY maintenances & special air displays, affecting primarily domestic flights

Overall **75% compliance rate**



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Network Post-Operations Analysis

Filtered Departure CTOT Compliance

Initiating ATFMU: Hong Kong
 Airline: All
 Departure Country & Airport: All / All



Hong Kong China activated trial no-delay GDPs in 2021 to retain proficiency and to extend the concept to East Asian States

Overall **80% compliance rate**

**** See a separate WP/12 from Hong Kong China for full detail ****



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MN Network Post-Operational Analysis Results

Interactive Dashboard

<http://bit.ly/amnac-poa>



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Collaboration during COVID-19 Pandemic



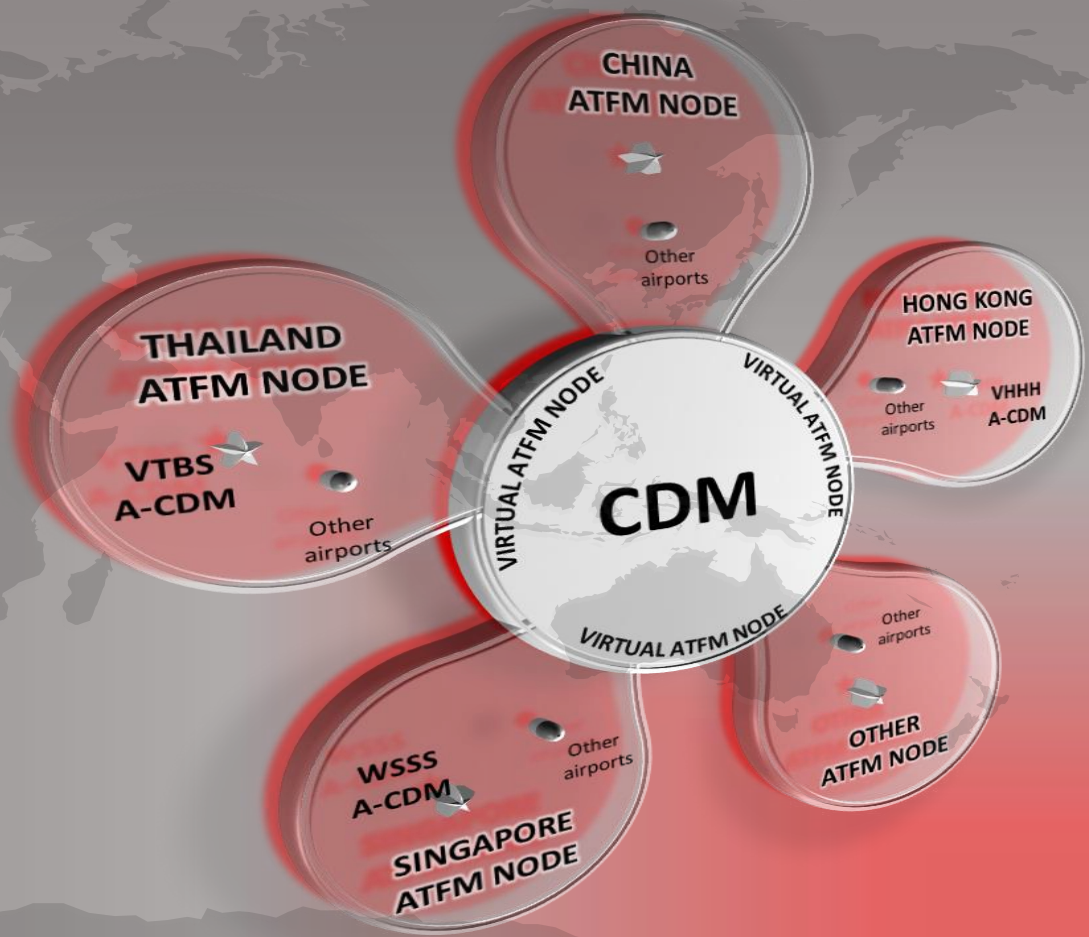
- ATM/ATFM Status Update process participated by many AMNAC members
- Bi-weekly ATFM planning conferences held once every 2 weeks
- Status Update documents kindly hosted by ICAO APAC at their [COVID-19 Information Sharing Webpage](#)



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Technical Progress Updates



Technical Sub-Group

Who we are

- Established to address cross-border ATFM information exchange challenges

End Goal

- To develop and implement technical specifications based on the ICAO System-Wide Information Management (SWIM) concept to achieve efficient and harmonized cross-border ATFM data exchanges

Near Term

- To develop and implement technical specifications to exchange ATFM information using existing EUROCONTROL Slot Allocation Message (SAM) and its related messages over AFTN/AMHS



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Where We Are

ATFM Data Exchange over AFTN/AMHS

- ✓ All Level-3 ATFM Nodes have implemented ATFM data exchange over AFTN/AMHS
- ✓ Hong Kong, China had also successfully conducted operational trials to exchange CTOT with Taipei ACC, Republic of Korea and Japan in first half 2021
- ✓ Interested nodes and States could approach us to arrange for technical trial, if desired, using specifications as per AFTN/AMHS-based ICD for ATFM v2.0, approved by CNS SG/24



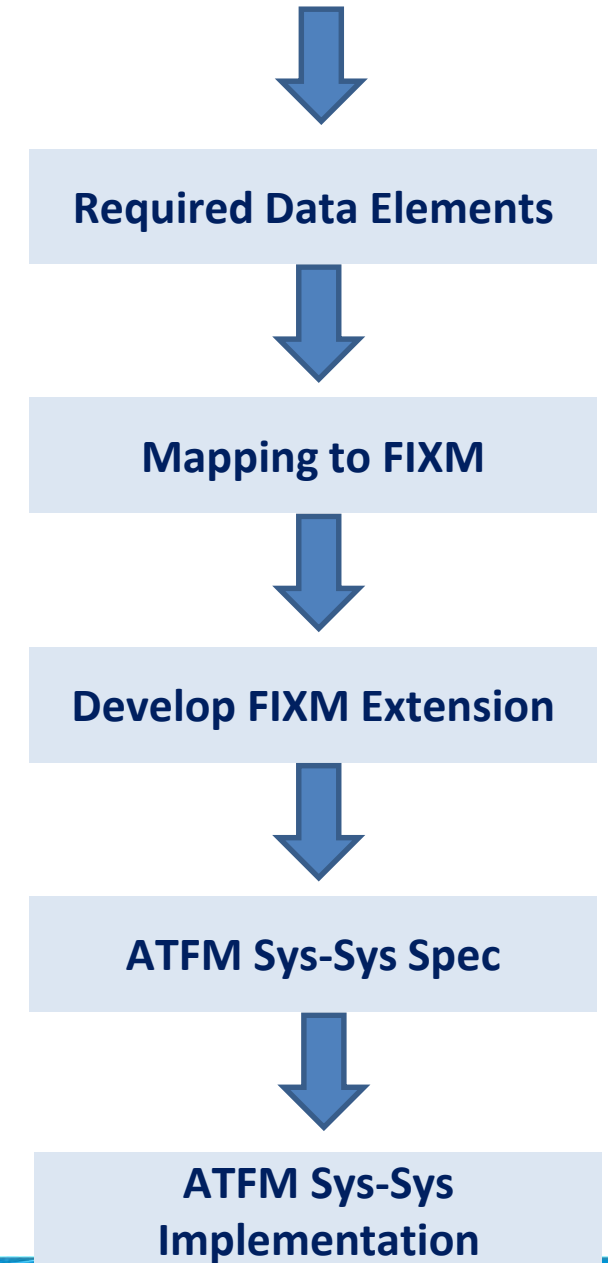
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Where We Are

ATFM Data Exchange over SWIM

- ✓ Developing technical specifications based on lessons learned from SWIM in ASEAN Demo
- ✓ Technical Trial over Common aeRonautical Virtual Network (CRV) to be conducted in Q1 2022
- ✓ Asia-Pacific FIXM extension being updated to version 4.2, with data attributes from FF-ICE/TBO and ATFM/A-CDM integration requirements



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Thank You!

