



ICAO

UNITING AVIATION

ATM Implementation Support by ICAO APAC RSO

March 2015

ICAO APAC Regional Sub-Office

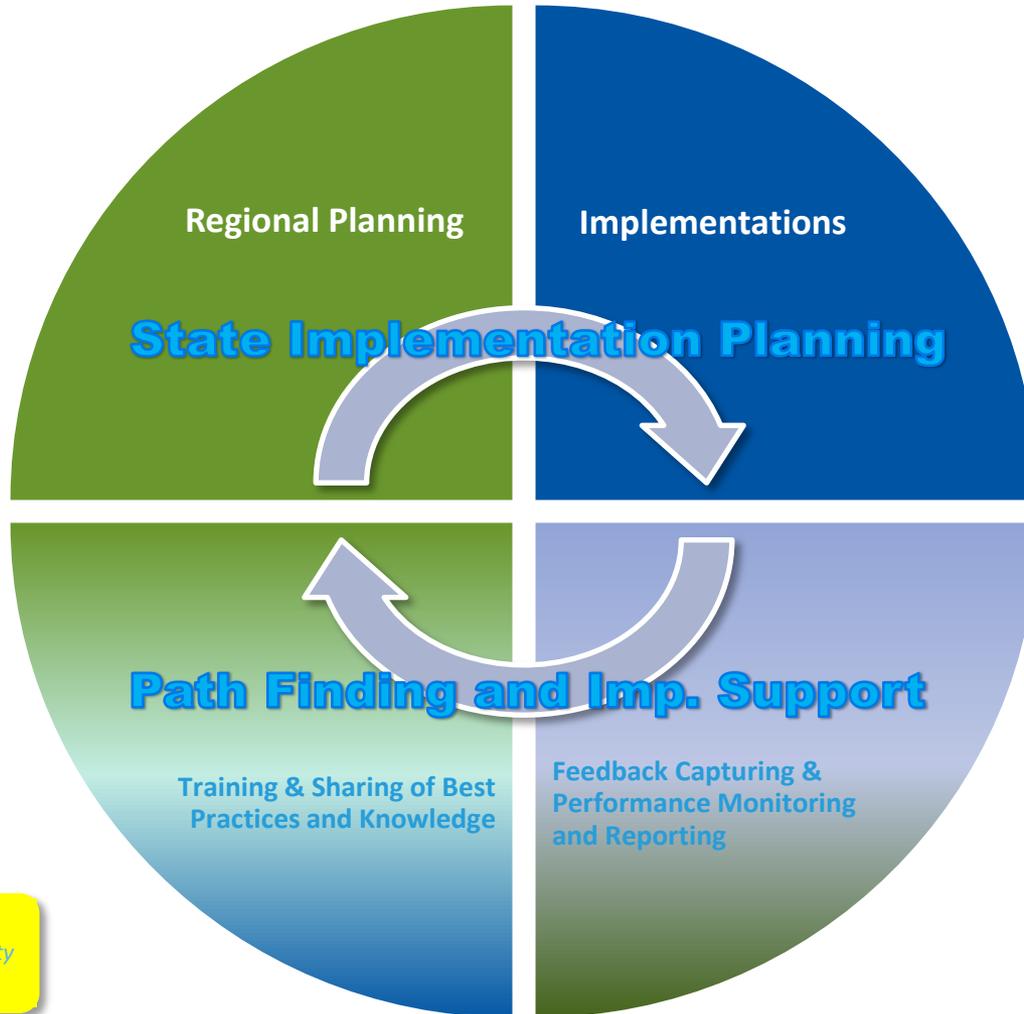
- ICAO Council agreed to establish a Regional Sub-Office (RSO) of the Asia Pacific (APAC) Office on 14 November 2011.
- The RSO was inaugurated in Beijing, China on 27 June 2013.





RSO - Responsibilities

- To improve airspace organization and maximize ATM performance and capability in Asia and Pacific.
- Entrusted by ICAO Council to support States for **implementation** of efficient management of airspace and air traffic flow in the APAC Region through Airspace Organization and Management (AOM), Collaborative Decision Making (CDM), Air Traffic Flow Management (ATFM), Flexible Use of Airspace (FUA) and Performance-Based Navigation (PBN) aimed at meeting traffic growth.



RO as Main Player
RSO as Supporting Player

RO as Supporting Player
RSO as Main Player

Note: Performance Monitoring and Reporting will be under the responsibility of the RO.



RSO Activities - 2013/2014

Airspace Organization and Management (AOM) and Performance Based Navigation (PBN)

Terminal Area

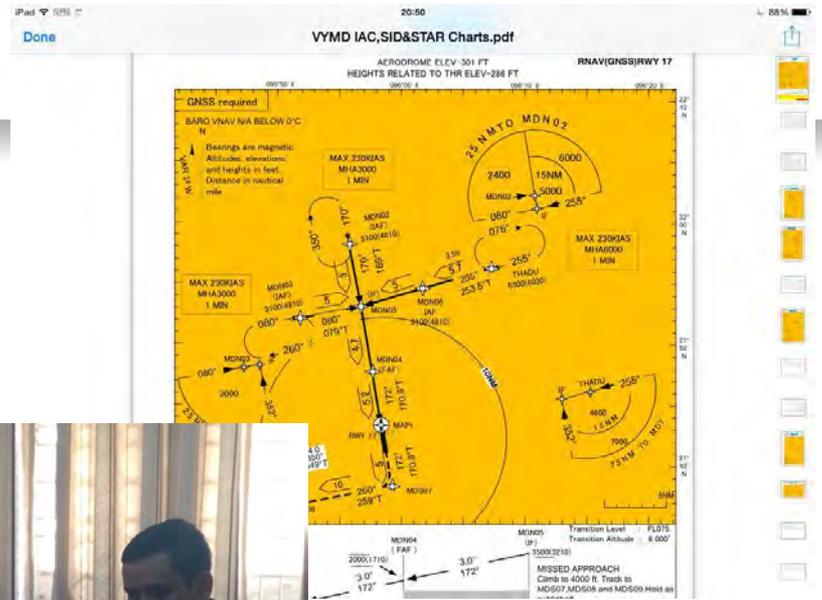
- Assisted Bangladesh, Fiji, Malaysia, Myanmar and Sri Lanka in effective airspace design using PBN for terminal airspace
- Assisted Bangladesh, Cambodia, Fiji, Laos PDR, Malaysia, Maldives, Mongolia, Myanmar, Sri Lanka and Thailand in implementations and validations of PBN procedures in coordination with the APAC FPP

PBN Operational Approval

- In cooperation with IATA, conducted trainings in PBN Operational Approval for regulators, airlines and ANSPs in Myanmar and Fiji
- Provided assistances on PBN Operational Approval to Bhutan



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RSO Activities - 2013/2014

Airspace Organization and Management (AOM) and Performance Based Navigation (PBN)

Airspace Optimization and Management

- Supported ICAO/IATA/CANSO PBN Global Go-Team visits and PBN Airspace Design Workshops in Thailand and China
- Conducted an Airspace Design Review for Fiji with participations from other Pacific Island States
- Conducted a workshop on Civil Military Coordination and Flexible Use of Airspace for APAC States
- Entrusted by ICAO IFPP to develop PBN Procedure Construction Manual

Implementation Trainings

- Conducted ATC training supporting PBN deployment in Bangladesh and Myanmar



RSO AOM and PBN Projects



BANGLADESH
PBN Review
Implementation Support
ATC Training
Airspace Design

BHUTAN
PBN Ops Approval

MONGOLIA
Review of Route Structure
Review of PBN TMA
Procedures
ATC Training

CHINA
PBN Go-Team
CMAC/FUA
Workshop

LAO PDR
Procedure Review

Bay of Bengal
Enhancement of PBN routes

Cambodia
Review of PBN
Implementation Plan

PACIFIC ISLANDS:
Ops-Approval Course
Fiji: PBN OJT w/ FPP, Airspace
Design, Implementation
Support
[ATC TRG]

MYANMAR
Ops Approval Course ,
Airspace Design,
Implementation Support
ATC Training

MALAYSIA
Airspace Design

SRI LANKA
PBN OJT, Airspace Design,
Implementation Support
[ATC TRG]

MALDIVES
Review of PBN Domestic
Routes



RSO Activities - 2013/2014

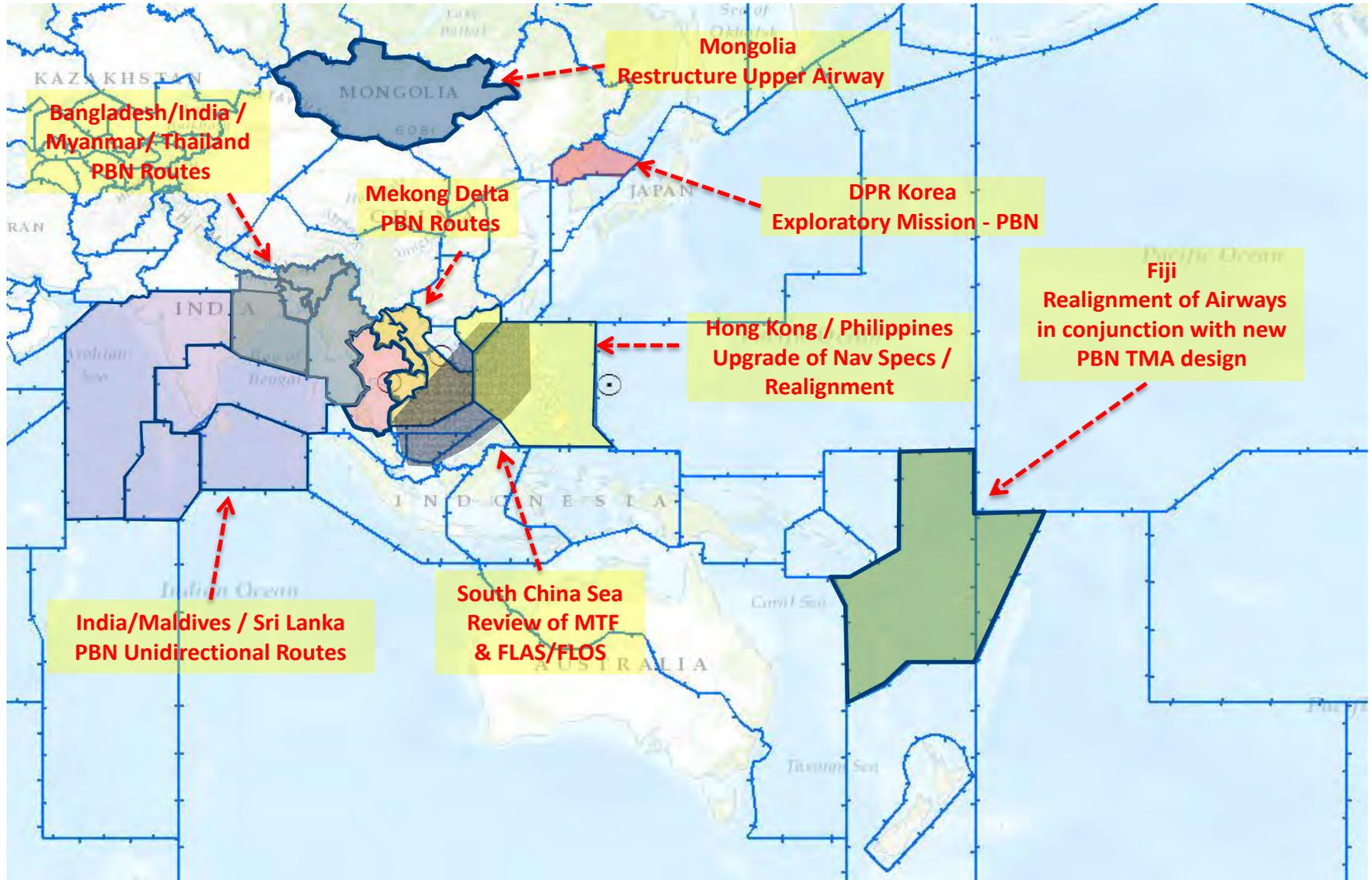
Airspace Organization and Management (AOM) and Performance Based Navigation (PBN)

Domestic and International En-route

- Through a PBN Design Session, assisted Bangladesh, India, Myanmar and Thailand to their on-going review of international route structure and aircraft separation over Bay-of-Bengal
- Through a PBN Design Session, supported Mongolia in the review and enhancement of international and domestic PBN route structure
- Entrusted by States in Mekong sub-regions, including Cambodia, Lao PDR, Myanmar, Thailand, Vietnam, to facilitate international and domestic route structure reviews within the sub-region
- Facilitated the first meeting of South China Sea Major Traffic Flow Review Group (SCS-MTFRG/1) in Malaysia



RSO Enroute Projects



RSO Activities - 2013/2014

Airspace Organization and Management (AOM) and Performance Based Navigation (PBN)

Global and Regional Harmonization and Prioritization

- In coordination with ICAO ANB and APAC RO, facilitated an establishment of the PBN Implementation Coordination Group under APANPIRG
- Entrusted by ICAO IFPP to develop PBN Procedure Construction Manual
- In coordination with ICAO ANB, assisted the establishment of Africa Flight Procedure Programme



RSO Activities - 2013/2014

ATFM/CDM

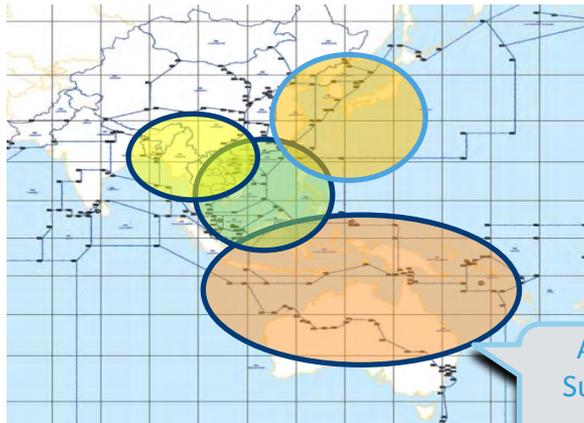
Regional Harmonization

- Assisted China, Japan and ROK on the establishment of North-Asia Regional ATFM Harmonization Group (NARAHG).
- Coordinated with ASEAN and Bangladesh, India, Myanmar, Thailand (BIMT) States on their on-going ATFM activities and initiatives

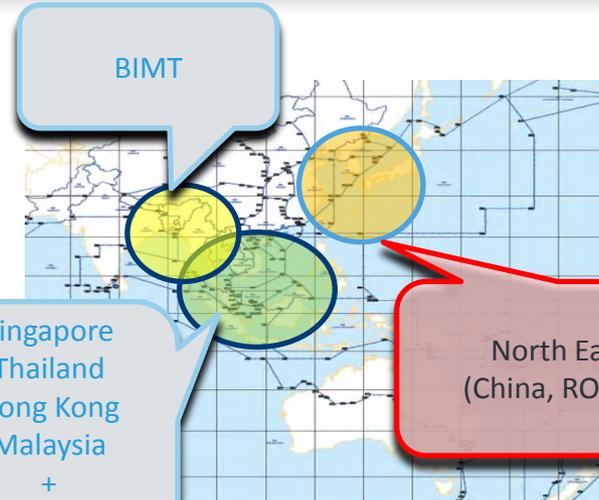




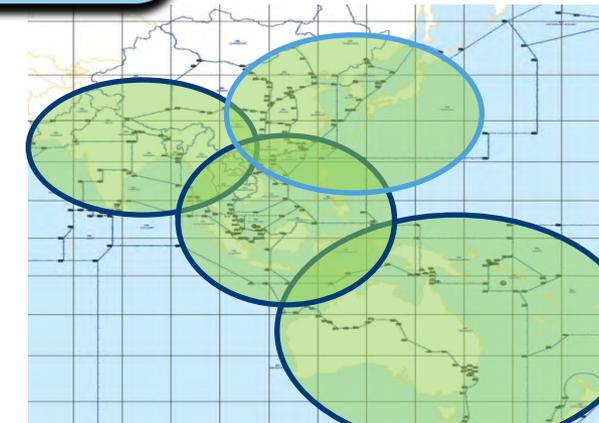
2013



Sub-Regional ATFM



2014

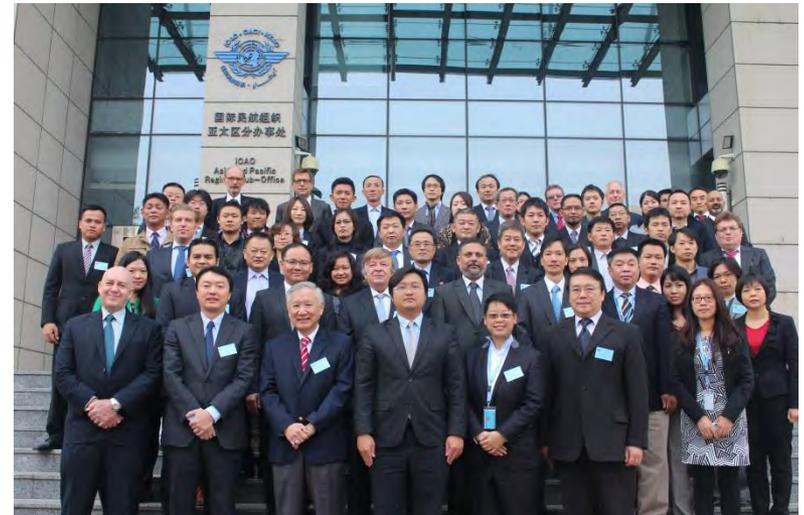


Harmonized Regional ATFM

RSO Activities - 2013/2014

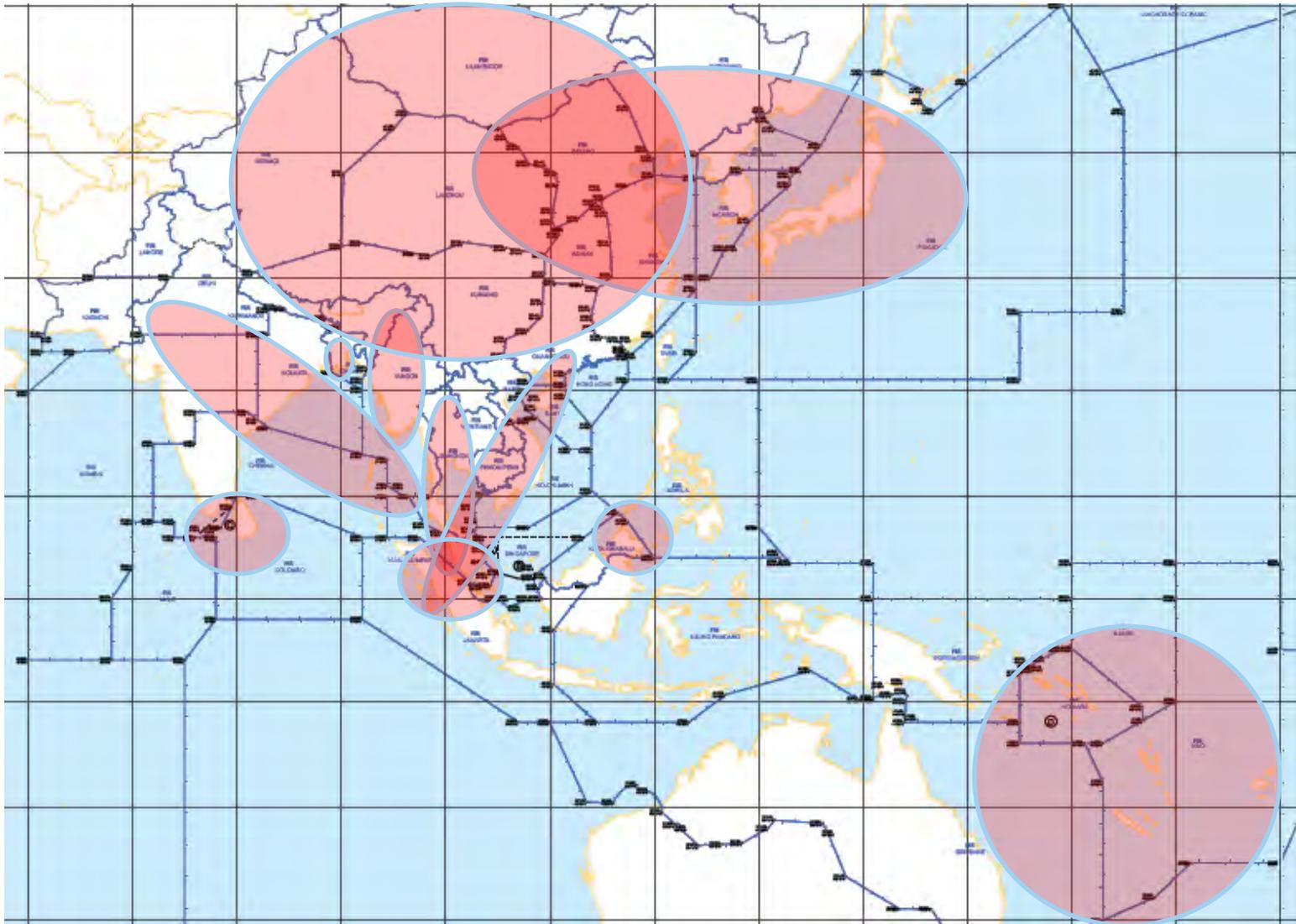
ATFM/CDM

- Conducted a project assessment for ATFM/CDM implementation project in Shanghai in coordination with CAA China
- Conducted a briefing to China to gain better understanding of China's plan for planning and implementation of ASBU, ATFM and CDM.
- Conducted a trial course on Introduction to ATFM/CDM to IATA and its airline members
- Conducted ATFM Workshop – Asia Pacific in October 2014 in preparation for the Fourth APAC ATFM Steering Group Meeting
- Conducted a Seminar on Basic Capacity Enhancement Concepts and Developments of ATFM for APAC States in Myanmar





Coverage of RSO Projects





Contributions from States and International Organizations

Hosted by: China

Officers seconded from:

China, Japan, Malaysia, Republic of Korea, Singapore and IATA

Financial/in-kind contributions received from:

China, DPRK, Fiji, Germany, India, Japan, Malaysia, Mongolia, Myanmar, Republic of Korea, Singapore, Thailand, the United States, ASEAN, IATA, CANSO, ACI and Eurocontrol



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Thank You