

REGIONAL FOCUS

A Conversation with ICAO Asia Pacific Regional Director, Mr. Tao Ma

Tuesday 25 January 2022

08:00 – 09:30 UTC



Mr. Poh Theen Soh

Director Asia Pacific Affairs

CANSO



Mr. Tao Ma

Asia Pacific Regional Director
ICAO



Outline



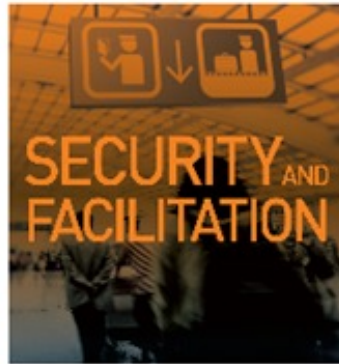
- Where does the ICAO APAC Region stand? (Beijing Declaration)
- How can we recalibrate ourselves against the future uncertainties?
- Roles of Aviation Stakeholders in ATM Modernization



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ICAO Strategic Objectives



- Standards and Recommended Practices (SARPs) and Policies
- Universal Safety Oversight Audit Programme (USOAP)
 - Regular, mandatory, systematic and harmonized safety audits
 - To promote global aviation safety by determining the status of implementation of relevant ICAO SARPS, associated procedures and safety-related practices
- Assistance for implementation
- Regional platform – 7 Regional Offices



ICAO APAC Regional Office

APAC Region's Opportunities & Challenges

- **39 States with vast airspace, different levels of air navigation system development and implementation of aviation security provisions**
- **Many FIRs (49): harmonized & uniformed service provision**
- **The fastest growth of air traffic (before COVID-19 and most likely even after)**
- **Slow pace of ANS implementation, Low USOAP CMA EIs**
- **New Norms to meet emerging challenges:**
 - Environmental considerations, Safe recovery on air traffic, Next epidemic disruptions, New entrants into airspace, Innovative technologies



Where does APAC stand with Beijing Declaration?



Intended Benefits of the Declaration

- First high-level Ministerial Conference
- Benchmark for States to assess progress.
- Demonstrate High level commitment to public, industry and investors.
- Recognizing the importance of human resource development to meet the growth.

➤ Commitment on:

- **Aviation Safety**
- **Air Navigation Services**
- **AIG**

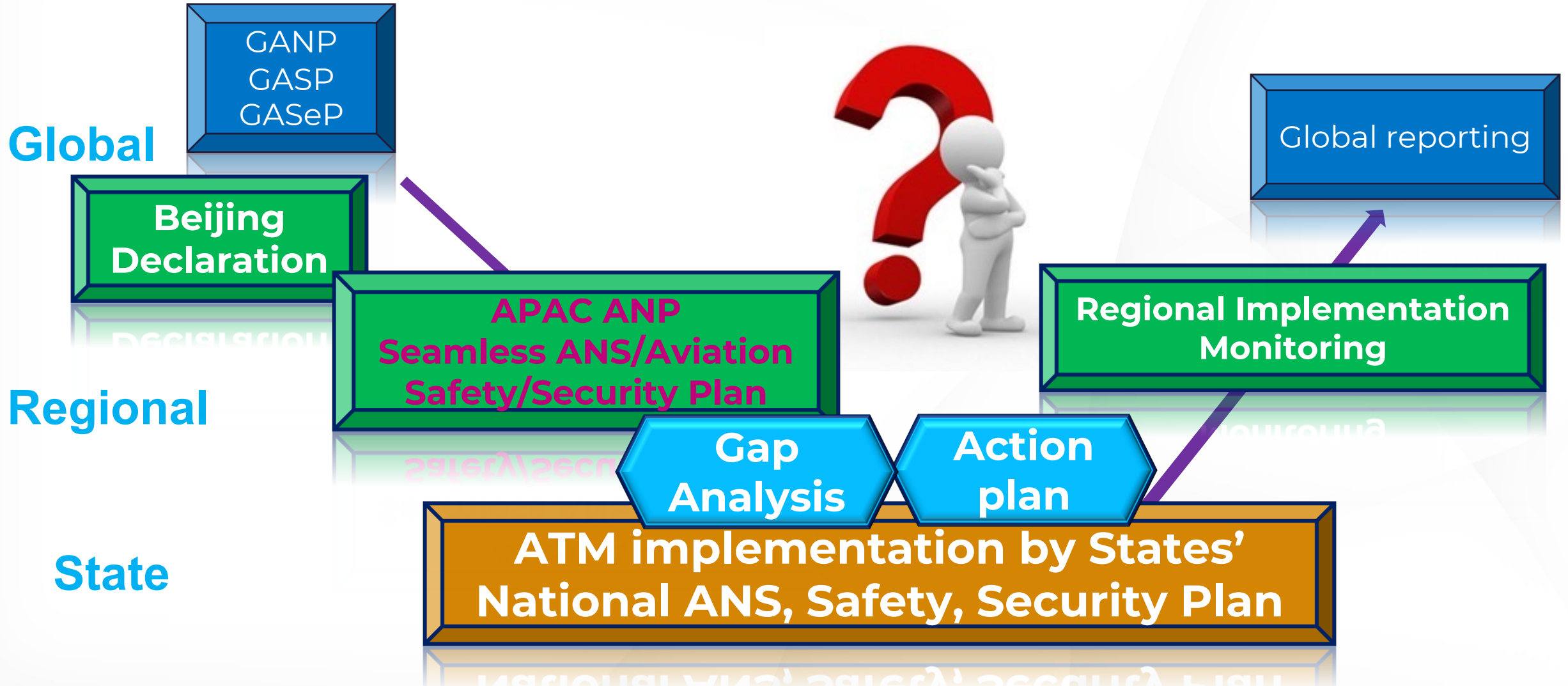




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Methodology



Beijing Declaration on Safety

USOAP Effective Implementation (EI)

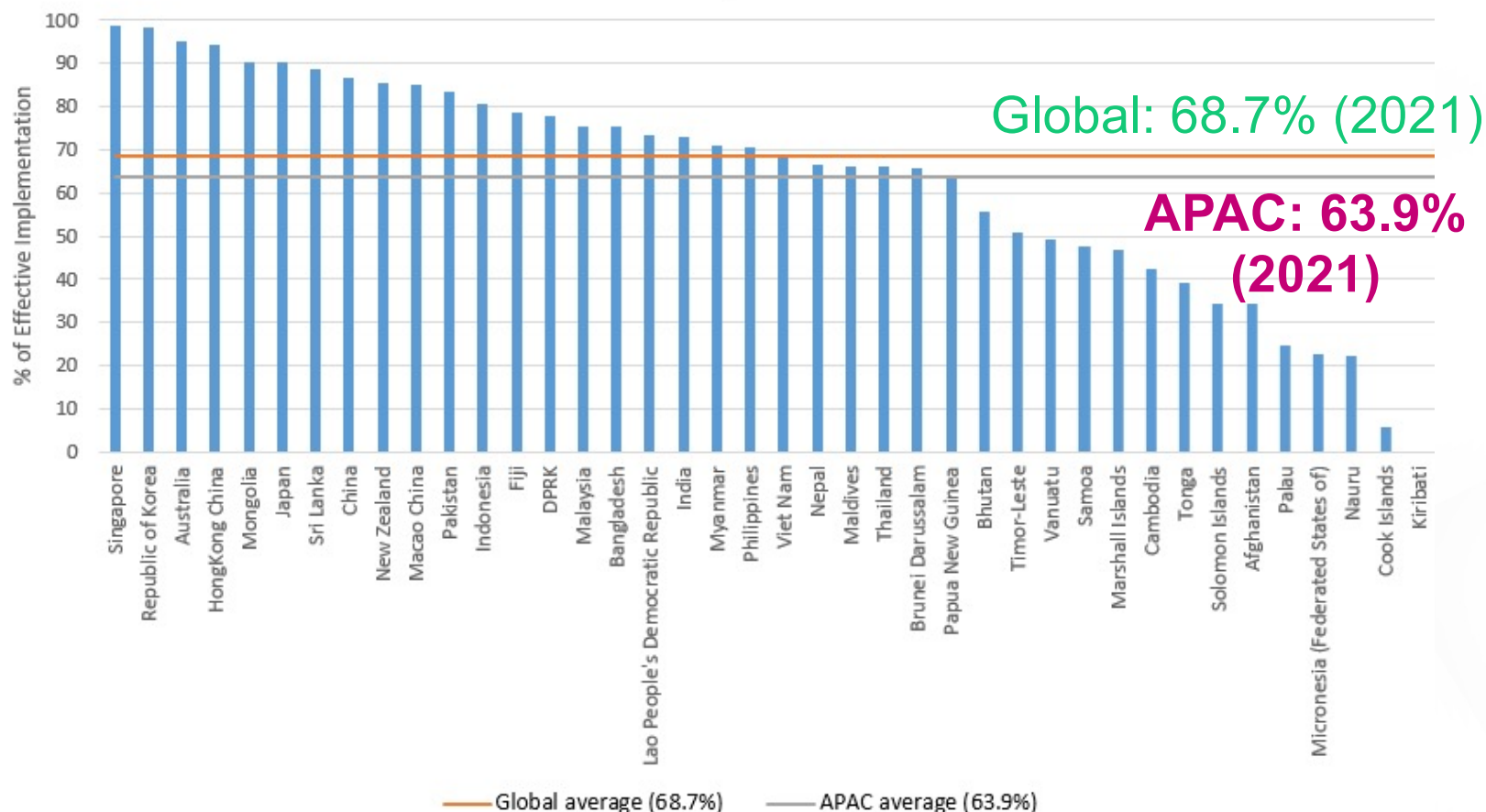


USOAP EI \geq global average by 2022



Indicator: National Effective Implementation percentage
Source: iSTARS (USOAP Data Tables Implementation Indicators)

USOAP Effective Implementation in APAC



Beijing Declaration on Safety

State Safety Programme (SSP)

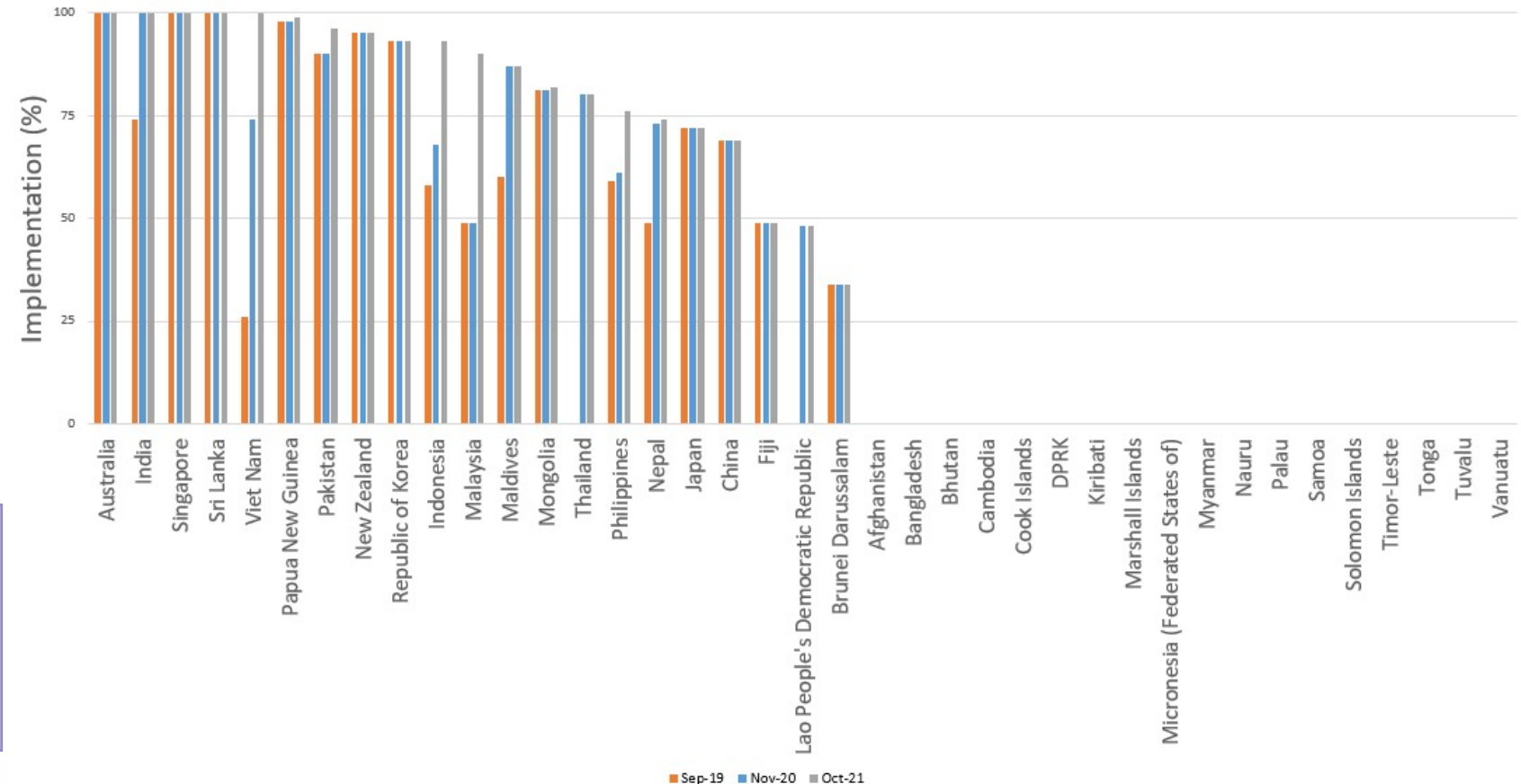


Implement an effective SSP by 2025



Indicator: National effective SSP implementation
Source: iSTARS (SSP Gap Analysis - SMM 4th Ed.),

APAC States having implemented SSP



Beijing Declaration on Safety

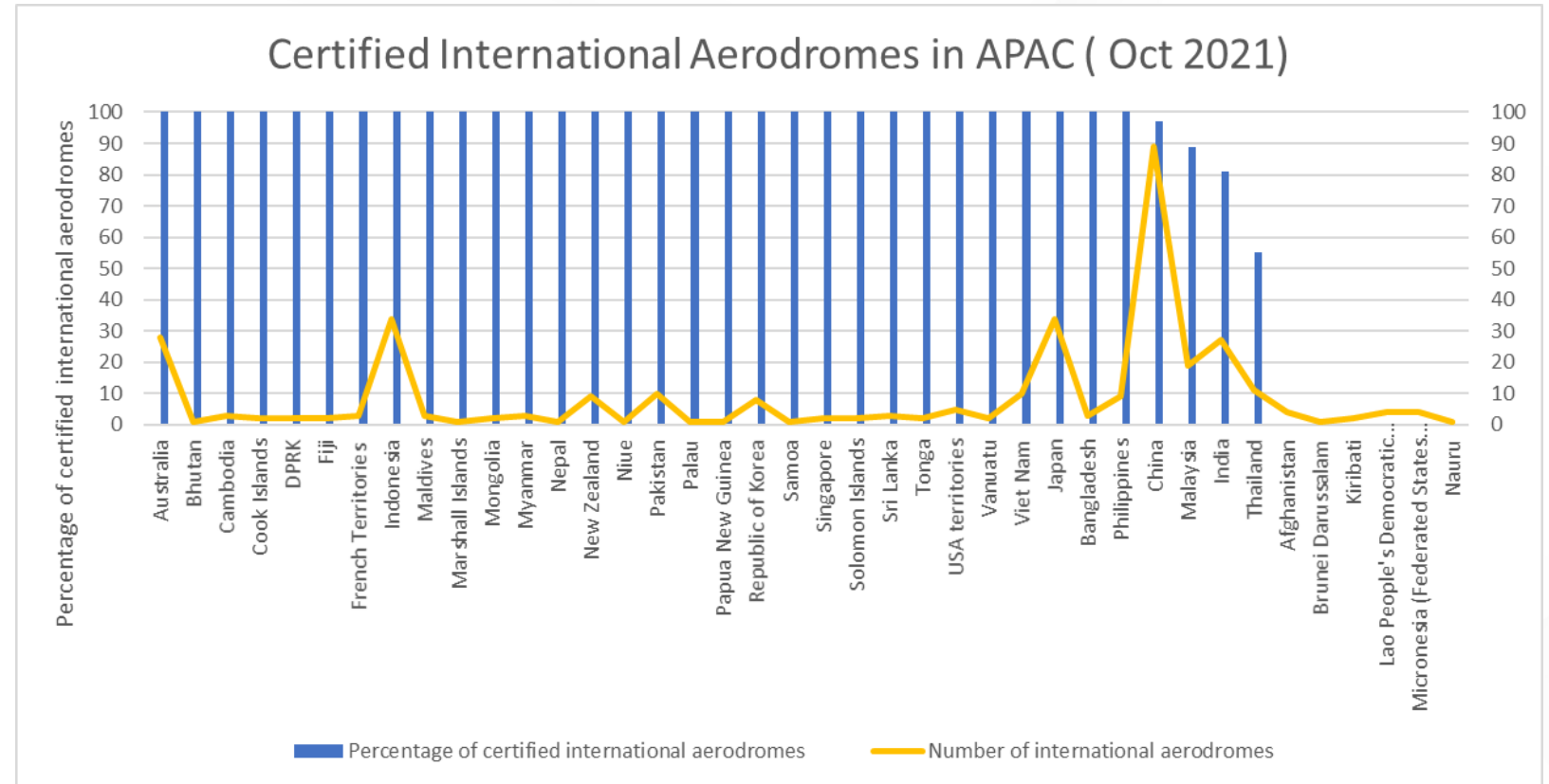
Certification of international aerodromes



Certify all aerodromes used for international operations **by 2020**



Aerodromes Operations and Planning Sub-Group (AOP/SG/5)



It has been improved to **90%** (319 aerodromes out of 353) versus **88%** (301 aerodromes out of 342) in Oct 2020



Beijing Declaration on Accident Investigation

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Independent Aircraft Accident and Incident Investigation Authority (AAIIA)

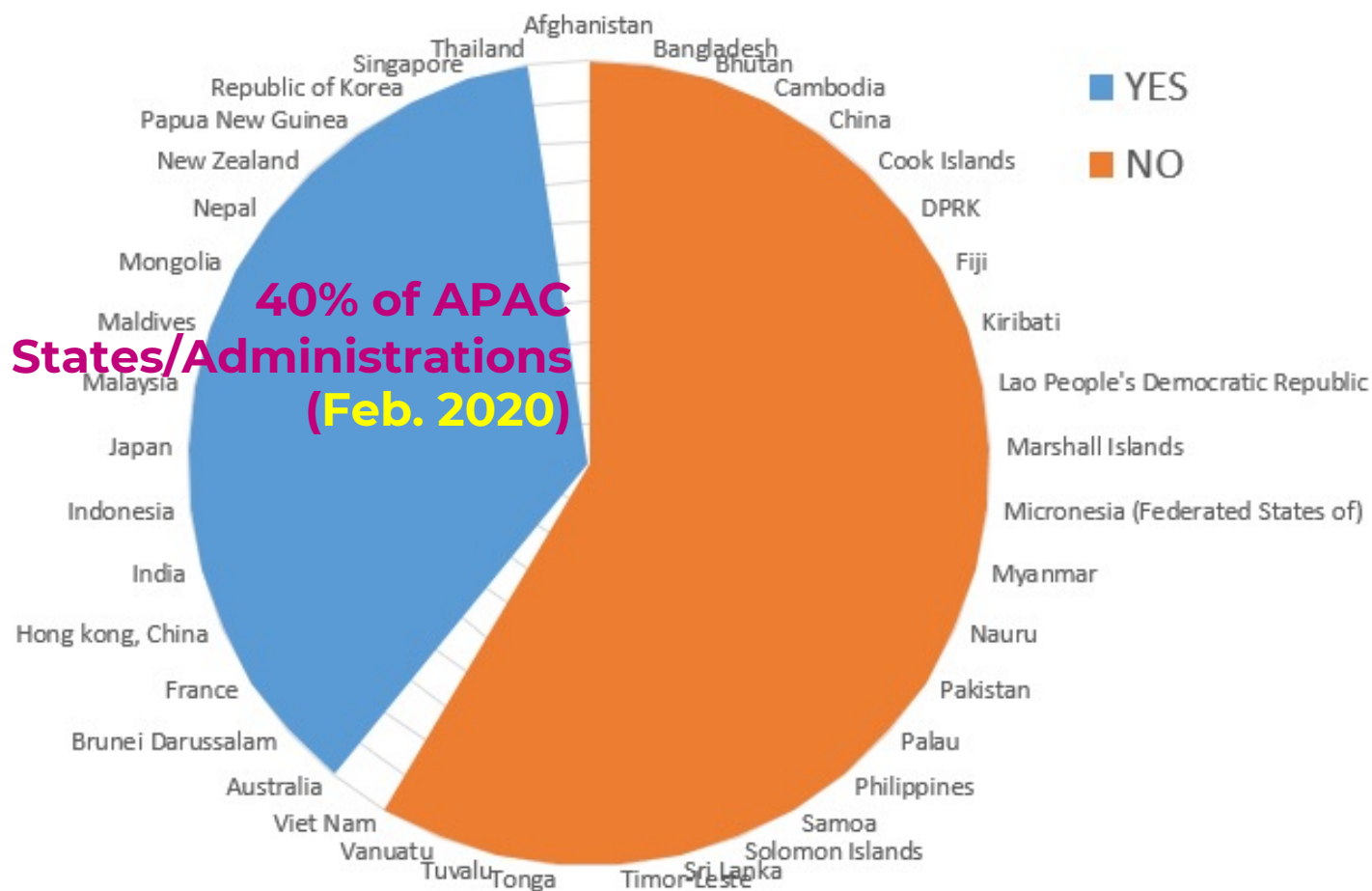


Commit to establish an accident investigation authority that is independent from State aviation authorities and other entities.

Indicator: Independent aircraft accident and incident investigation authority (AAIIA)



RASG-APAC monitoring mechanism, Asia Pacific Accident Investigation Group (APAC-AIG/9)



Beijing Declaration on ANS

Aeronautical Information Management (AIM)

➤ Phase I (Consolidation existing SARPS)

- immediate implementation
- current status = **54 %** (51% in Nov 2020)

➤ Phase II (Going Digital)

- target November 2019
- current status = **38 %**

➤ Overall Phase 1 & 2 = **48%**

➤ Phase III (including SWIM-dependent AIM)

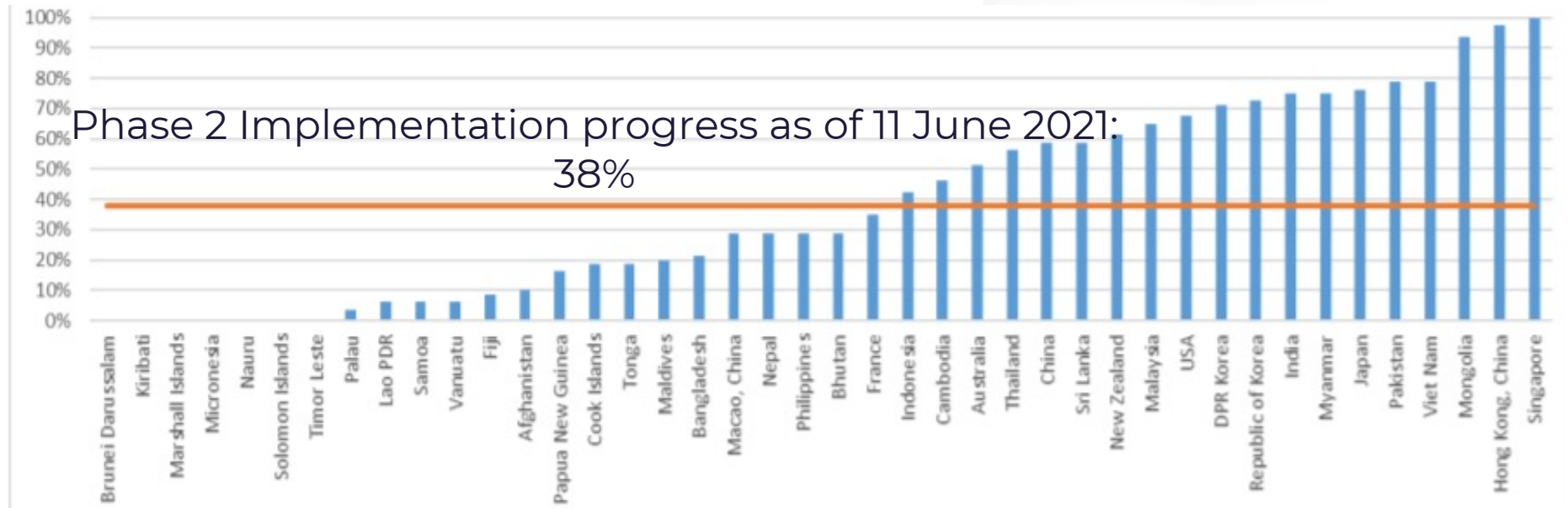
- target: November 2025
- current status = **12 %** (10% Nov 2020)



Transitioning from
AIS to AIM
by 2022
(Phase I and II)



AIS-AIM
Implementation
Task Force
(AAITF/16)



Beijing Declaration on ANS

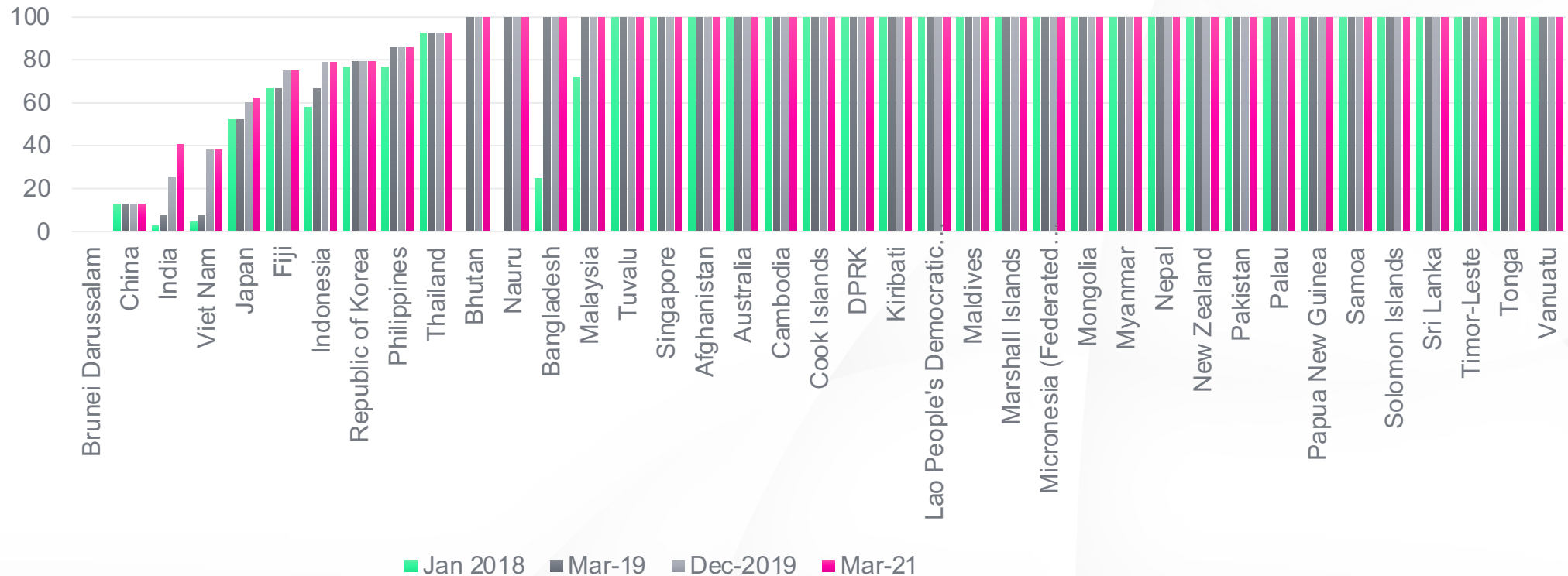
Performance Based Navigation (PBN)



PBN implementation
by 2022



% PBN intl runway ends
iSTARS and Jeppesen
(March 2021)



Beijing Declaration on ANS

Civil Military Cooperation



An enhanced level of
civil/military
cooperation by 2022



Seamless ATM
reporting
(Nov. 2020)



Given that lack of civil/military cooperation is a significant factor in the Asia/Pacific's relatively poor ATM efficiency compared to more developed areas of the world, the regional progress is well behind expectation for these elements.



Beijing Declaration on ANS



Common ground/ground telecommunication infrastructure to support Air Navigation Services (ANS) applications



Common ground/ground telecommunication infrastructure to support ANS applications by 2022



CNS meetings

14 States/Administrations (compared to 11 last year) have joined **CRV** and implemented operations: Australia, Bhutan, China, Hong Kong China, Fiji, Japan, Malaysia, Nepal, New Zealand, Philippines, PNG, Republic of Korea, Singapore and USA;

Additional 5 States (France-New Caledonia and Polynesia, India, Indonesia, Russia, Thailand) have plan to join CRV.



Beijing Declaration on ANS



Surveillance capability



Enhanced surveillance capability including ADS-B technology by 2022



CNS meetings

31 States/Administrations (30 last year) installed ADS-B ground stations and
12 States (same) issued ADS-B mandate
8 States (same) used ADS-B for separation and others for awareness, gap filling and redundancy.



Beijing Declaration on ANS



Air Traffic Flow Management (ATFM) / Airport Collaborative Decision Making (A-CDM)



ATFM/CDM implementation for high density airports by 2022

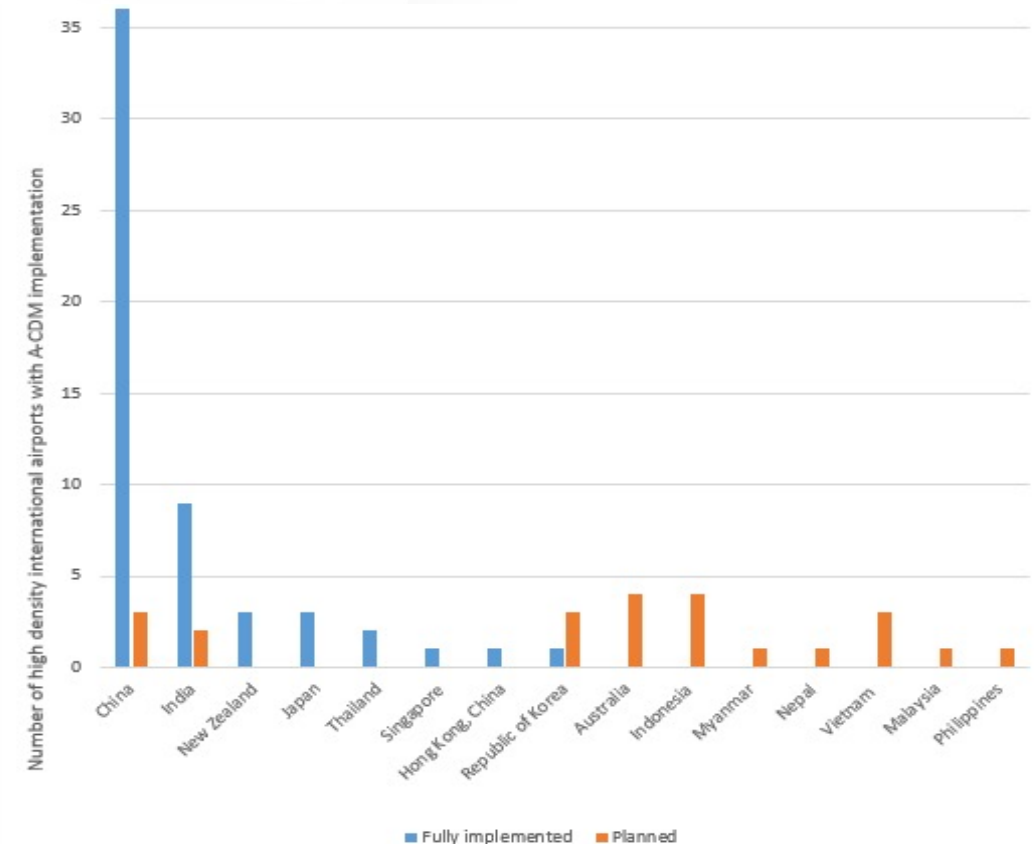


Regional ATFM Plan Monitoring and Reporting, APAC A-CDM Implementation Survey and APA-CDM/TF/6 Meeting

Total number of international high density airports = **73** (pre COVID-19)

As of June 2021, **56** of them (55 international + 1 domestic) had implemented A-CDM (49 last year)

23 have planned to implement A-CDM.





Beijing Declaration on ANS



National Air Navigation Plan (NANP)



Include air navigation in national planning frameworks such as National Development Plans (NDPs) supported by National Air Navigation Plans by 2022

Few States have reported to the Regional Office having developed a National Air Navigation Plan (NANP) :

Indonesia, Lao PDR, Hong Kong China, Singapore, Thailand, Myanmar, Viet Nam and Philippines.

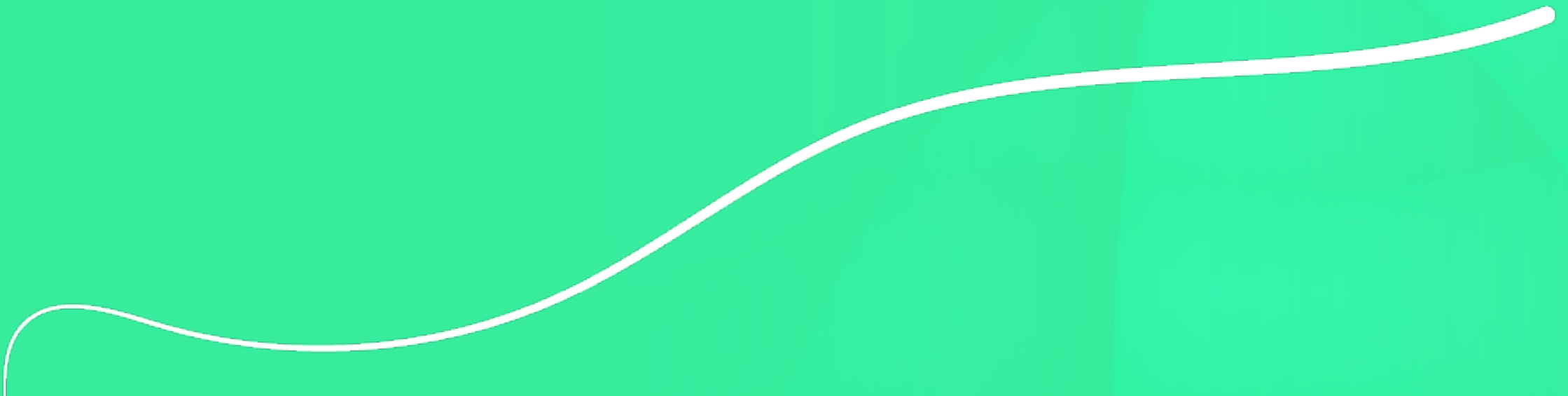


Survey in 2019 and update



How can we recalibrate ourselves against the future uncertainties?

Innovative, Resilient and Adaptable Aviation



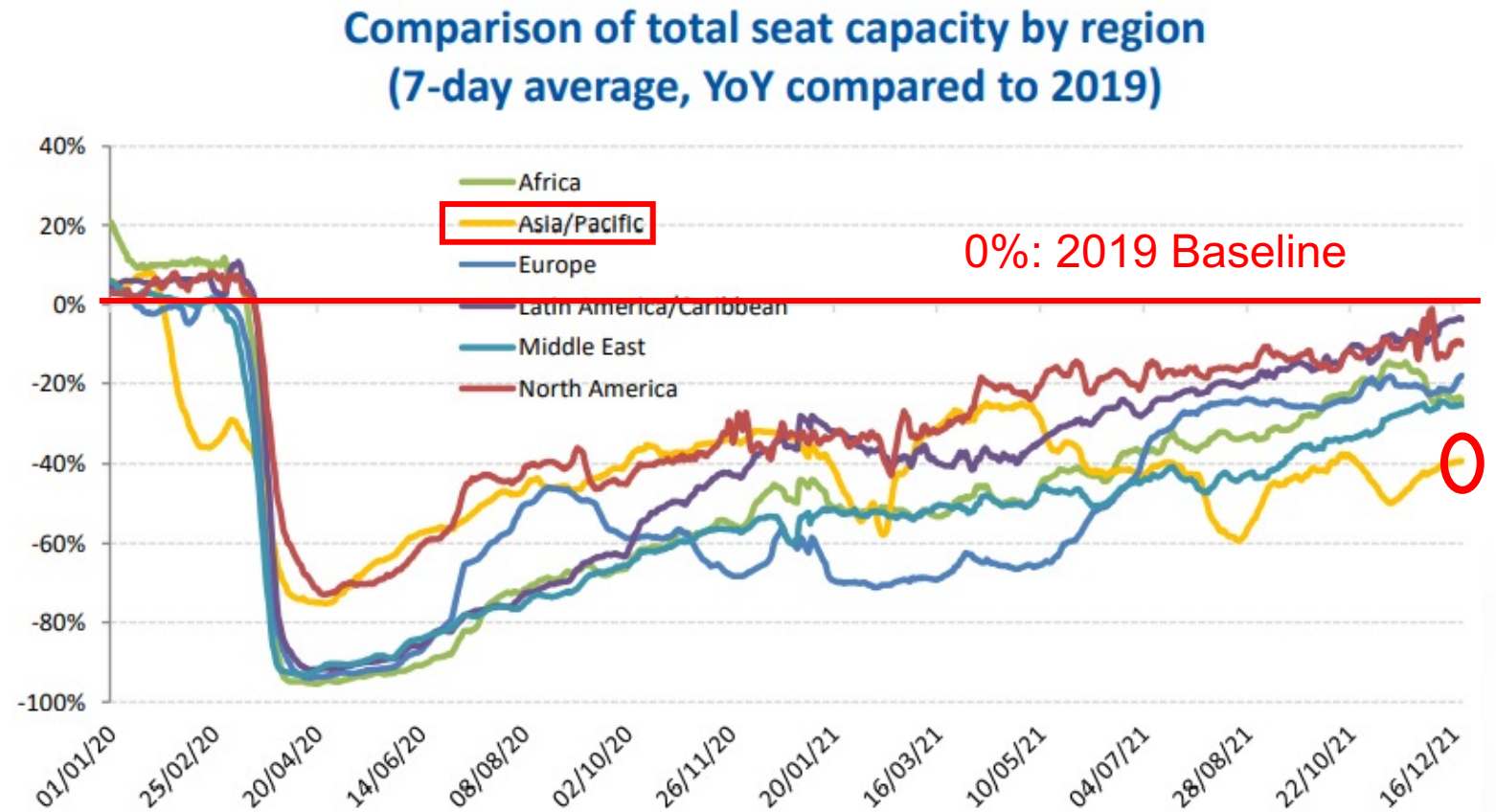


COVID-19 Impacts on APAC Aviation

Heavily impacted APAC Aviation

ICAO APAC's Initiatives

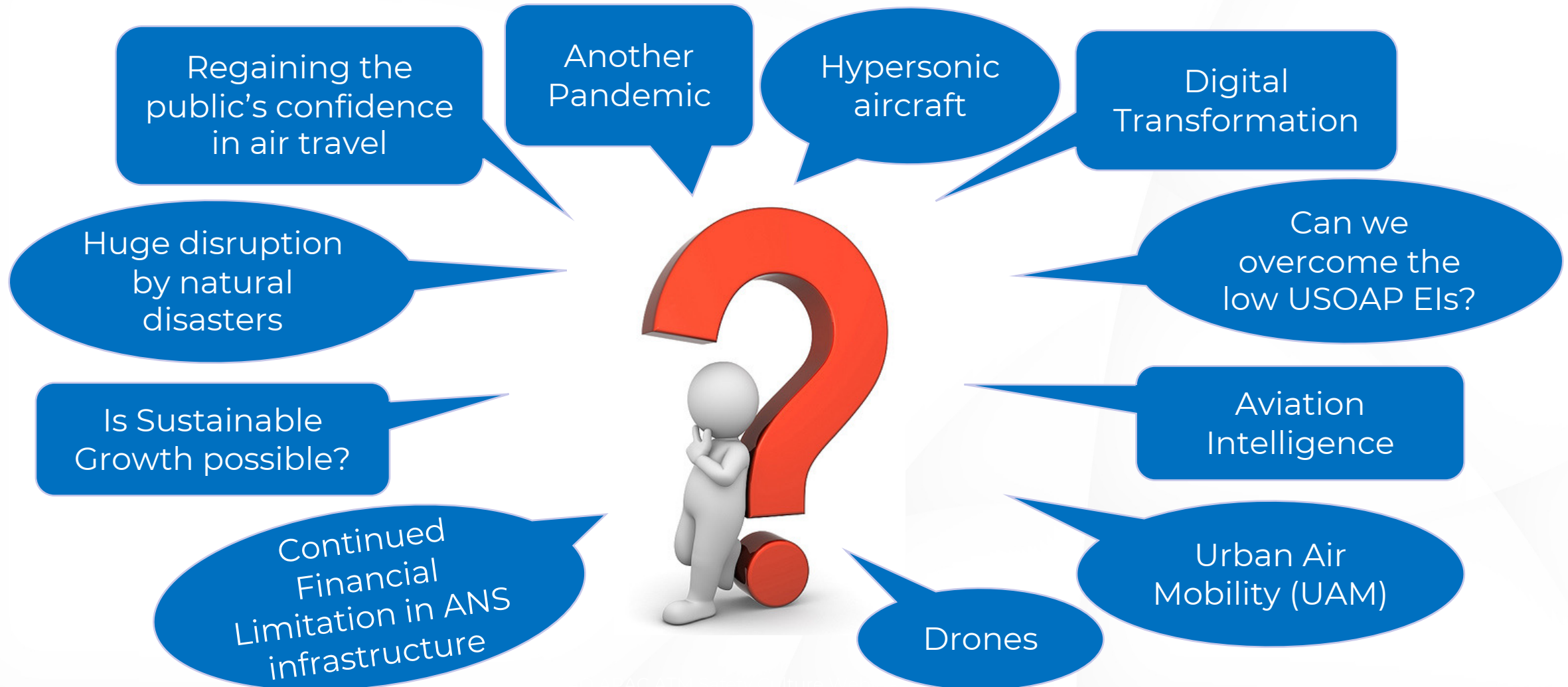
- ACCRPG – CRRIC
- HLCC
- 3 rounds of Webinar series on Safety and ANS
- Calling for Better Coordination between health and civil aviation authorities



Data from ICAO Economic Impacts of COVID-19 on Civil Aviation: 21 Dec 2021 report

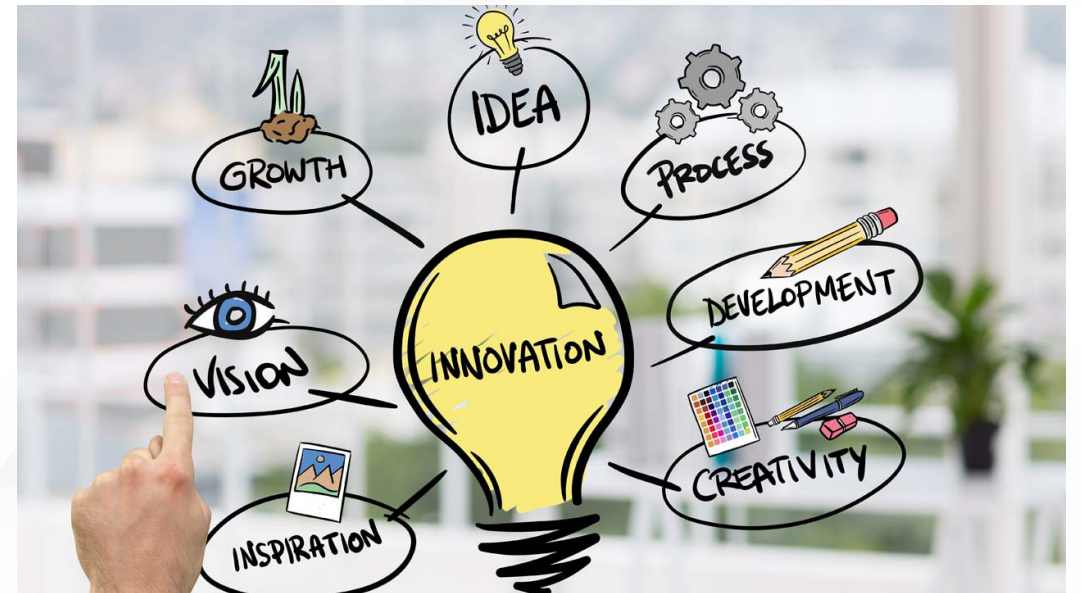
Ever-changing Aviation

What possible uncertainties ahead?



Building back better APAC Aviation in harmonized and uniformed way for our common goal

- New ways of work
- Proactive approaches adopting new tools and technologies
- Different ways of thinking (Out-of-the box thinking)
- Performance and Outcome-oriented
- Data-driven Decision Making
- Harmonized integration of Manned and Unmanned aircraft in common airspace
- Harmonized & proactive collaboration between industries, organizations and States





Resilient and Adaptable Aviation



Resilience and Adaptability

- High management's REAL commitment and support
- Competent personnel with Knowledge, Attitudes and Skills
- Informed Decision-making based on data/information
- Effectiveness of the systems
- Confidence in remaining effective
- Good Change Management
- Flexibility



resilience:

“an ability to recover from or adjust easily to misfortune or change.”

—Merriam-Webster Dictionary

ADAPTABILITY:

the quality of being able to adjust to new conditions;
the capacity to be modified for a new use or purpose

“[t]he capacity of a dynamic system to adapt successfully to challenges that threaten the function, survival, or future development of the system.”
—Ann Masten, Professor, University of Minnesota College of Education and Human Development



Roles of Aviation Stakeholders in ATM Modernization

One Aviation Team Spirit

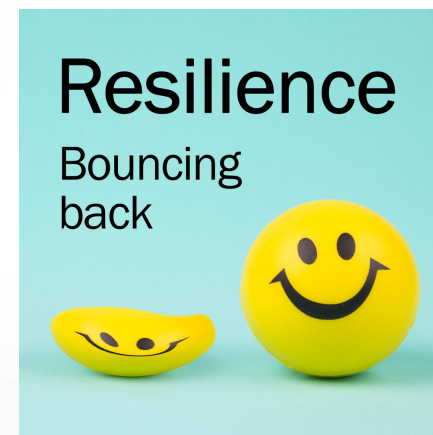


We are all in this together being responsible in 'One Aviation Team Spirits'

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Cooperation, Collaboration and Communication

- **Each stakeholder** has an important role to play as one member of the One Aviation Community for the common goals
- **Every stakeholder**: Learn from each other to increase resilience in Aviation
- **States**: Proactively participate, cooperate, collaborate and communicate with relevant entities (other States, Int. organizations, industries)
- **Every stakeholders**: Learn from each other to increase resilience in Aviation
- **By Sharing & Exchanging** of experience and data cross-regionally



What can we do better ?

Better Facilitator as a regional Platform for all stakeholders

- Effective monitoring of the implementation of regional plans
- Proactive support for States
- Stimulate awareness about new concepts/new technologies : RECAT, GBAS/SBAS, SWIM, drones, ...
- Strengthen the Human Performance through the training in the region
- DGCA Conference July 2022
- 41th Assembly Sep Oct 2022





My priorities on ICAO APAC's 2022 work programme

- To get more high-level commitments and supports
- Collaborative efforts for aviation recovery from COVID-19 impacts
- The APAC USOAP EI to reach the global average by 2022
- Resolution of SSCs and SSeCs
- Efficient and Resilient Capacity building in ANS
- Mobilize all stakeholders of the region to support late States and appear as “One Aviation Team”
- Mobilize all training center resources of the region
- Implement the 16 Priority elements of the APAC Seamless ANS Plan
- Implement the Recommendations of the PSIDS Aviation Needs Analysis Study (Pacific Liaison Officer)



THANK YOU



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SHAPING OUR FUTURE SKIES

PANEL DISCUSSION





**Capt. Amornvaj
Mansumitchai**

Deputy President
IFALPA



Ms. Cheryl Chen

Executive VP Asia Pacific
IFATCA



Mr. Blair Cowles

Asia Pacific Director of Operations
IATA



THANK YOU

