



| ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



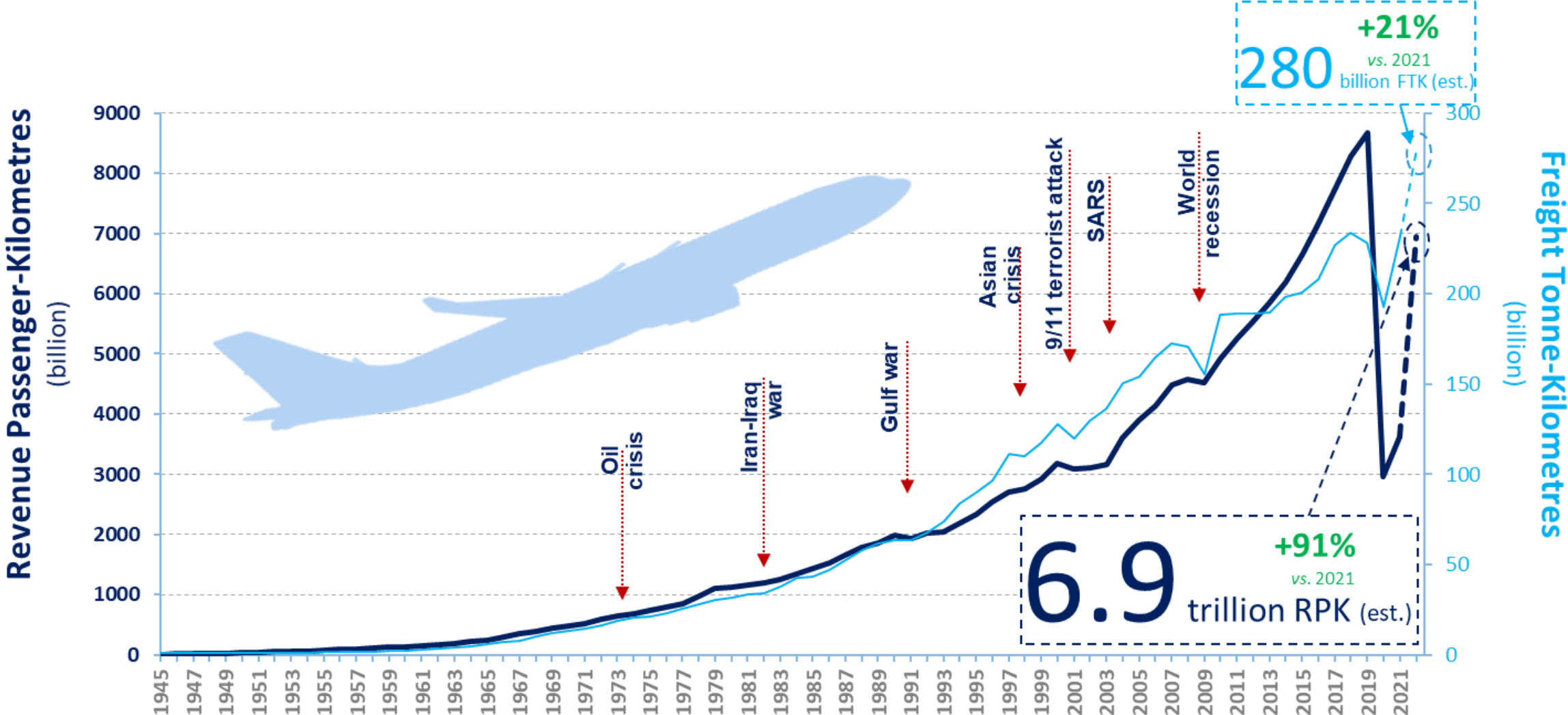
Air Transport Updates

**58th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

International Civil Aviation Organization (ICAO)

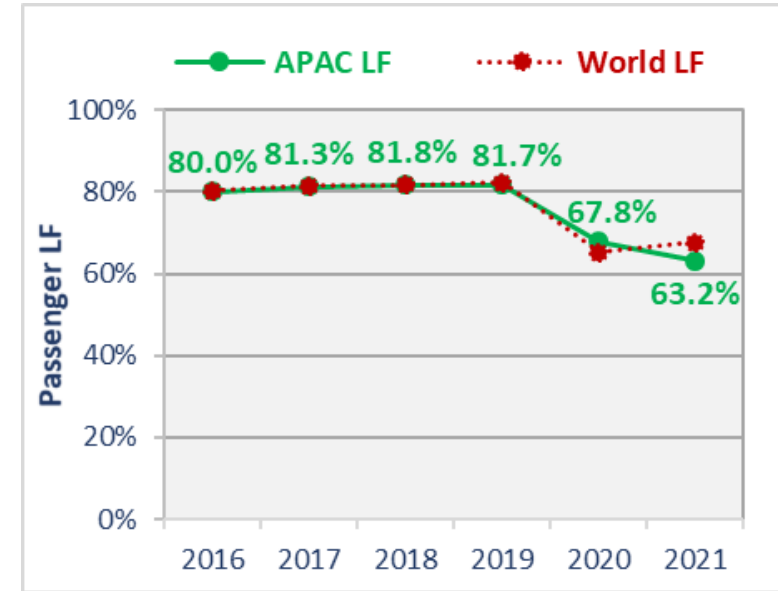
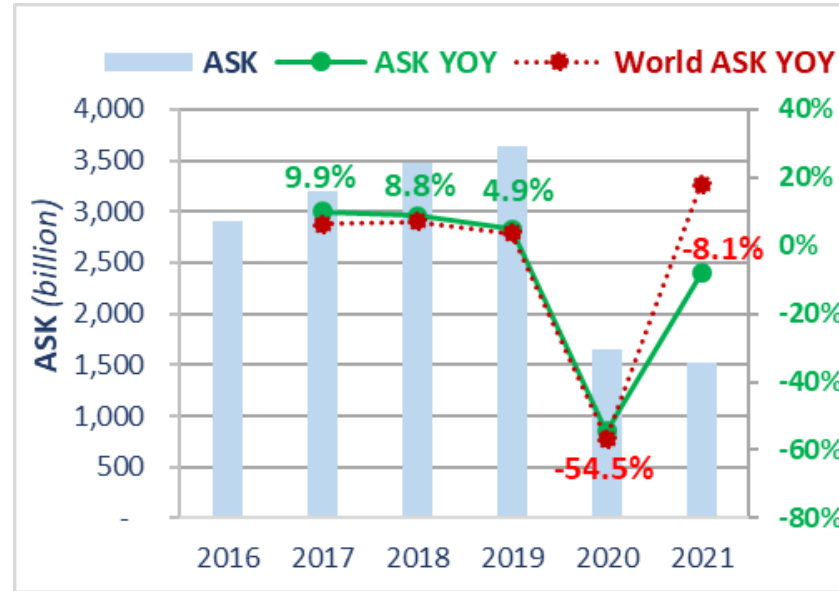
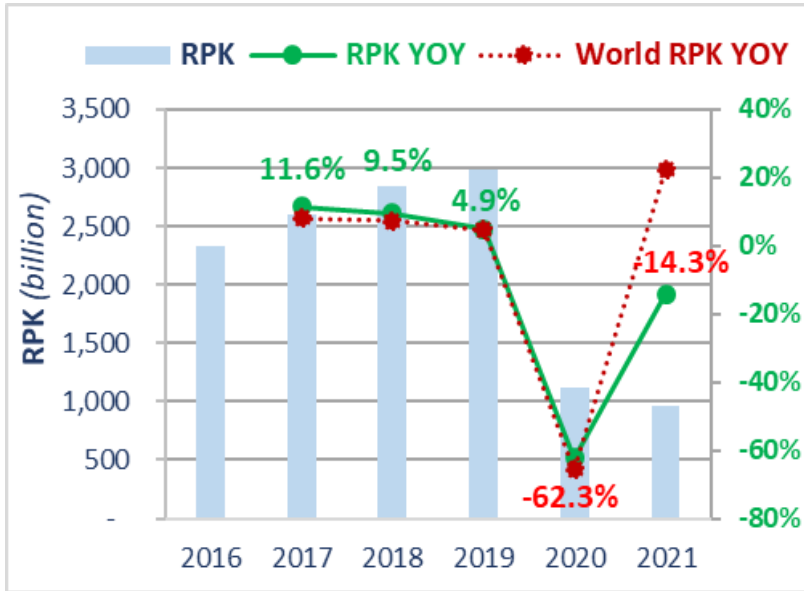
State of the Industry

Global traffic: A recovery from the pandemic shock



Source: ICAO Air Transport Reporting Form A, A-S and forecast

Asia/Pacific Passenger Traffic



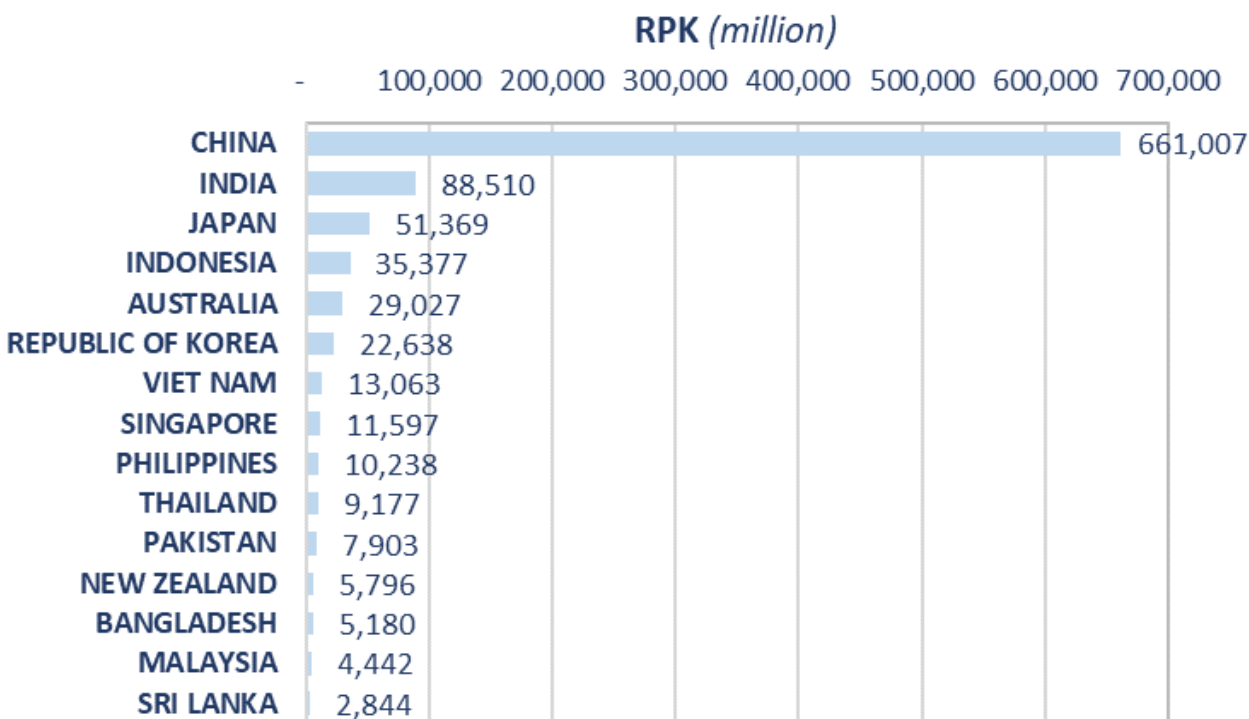
- Passenger traffic in Revenue Passenger-Kilometres (RPKs) showed merely 32.3% in 2021 compared to the 2019 level.
- Passenger traffic was severely impacted than the world average.

- Seat capacity in Available Seat-Kilometres (ASKs) was merely 41.8% in 2021 compared to the 2019 level.
- Seat capacity was severely impacted than the world average.

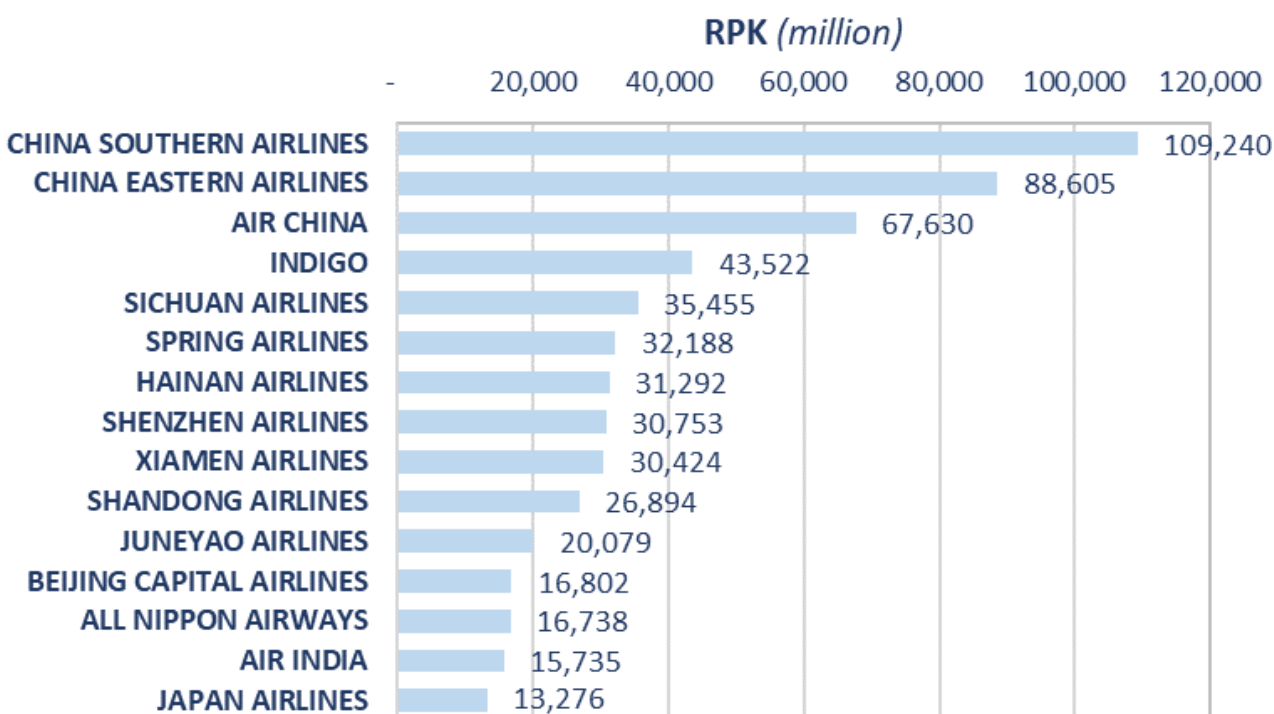
- Passenger load factor declined to 63.2% in 2021.
- Passenger load factor is lower the world average.

Asia/Pacific Passenger Traffic

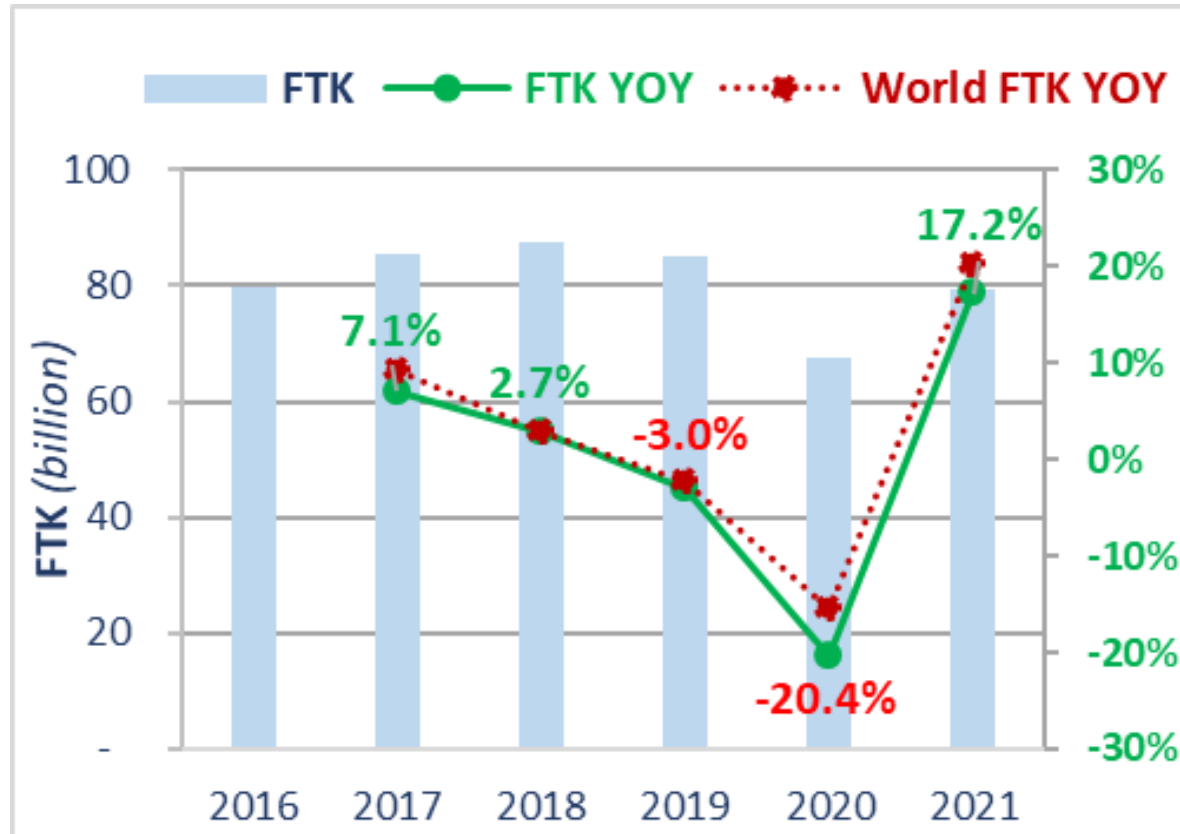
Top 15 States ranking (2021) by Revenue Passenger-Kilometres



Top 15 Airlines ranking (2021) by Revenue Passenger-Kilometres



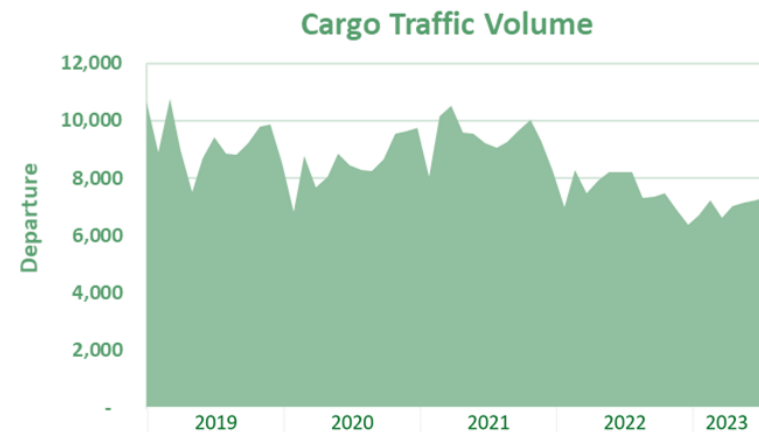
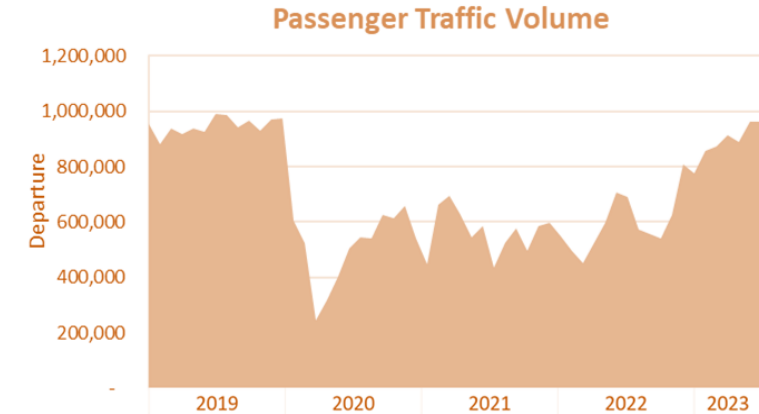
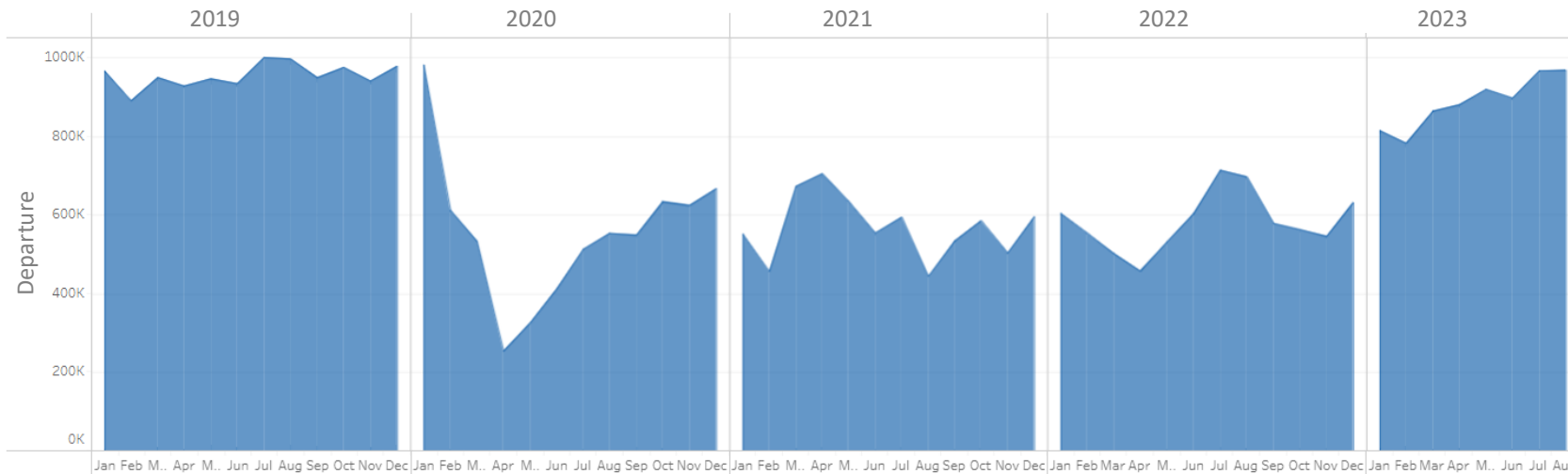
Asia/Pacific Cargo Traffic



- Cargo traffic measures in Freight Tonnes-Kilometres (FTKs) recovered by 17.2% in 2021.
- FTK YOY rate in 2021 is slightly lower than the world average.

Asia/Pacific Evolution of traffic

Total Departure Volume

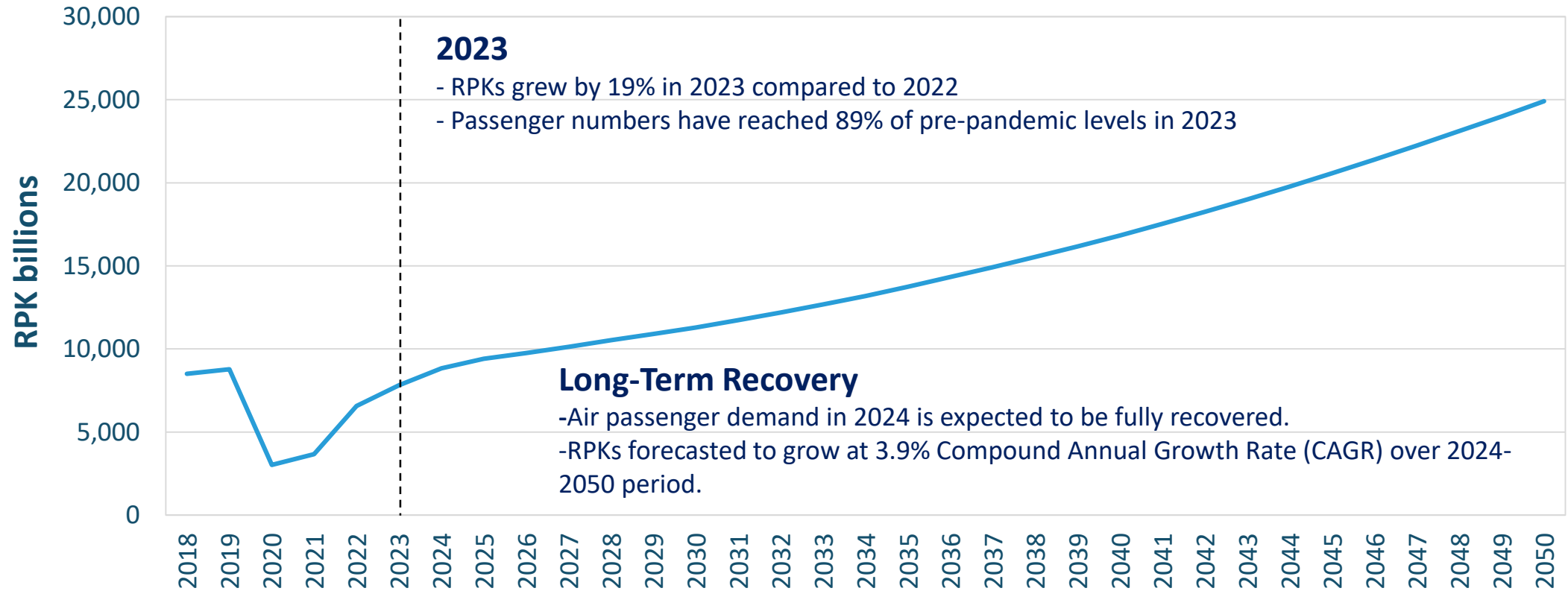


- Total departures from Asia/Pacific region have shown constant recovery since the pandemic shock.
- Scheduled passenger departure volume in 2023 Jan-Aug recovered by 93% compared with 2019 Jan-Aug.
- Scheduled cargo departure volume, on the other hand, shows a slight decreasing phase after the pandemic.

Source: ICAO Aviation Data Analytics Dashboards

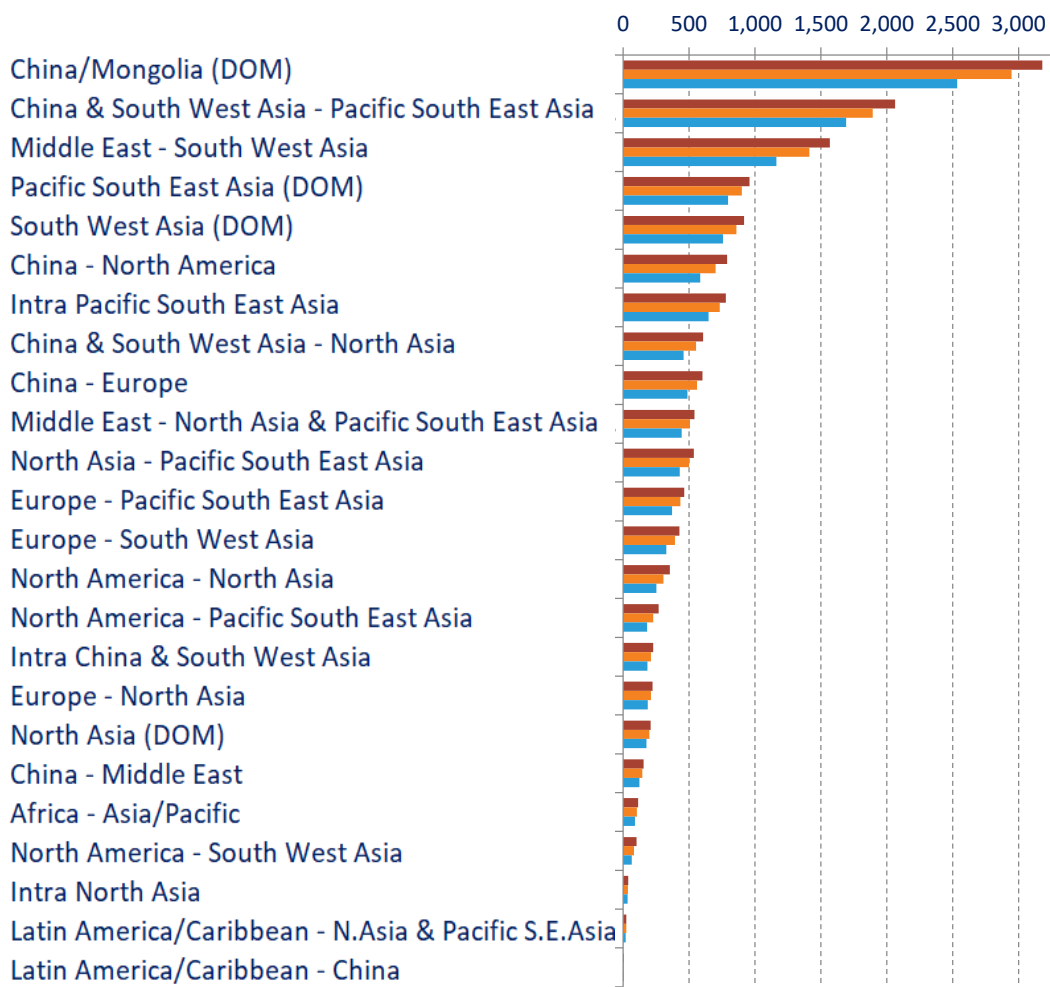
Global Long Term Traffic Forecast

Global RPK



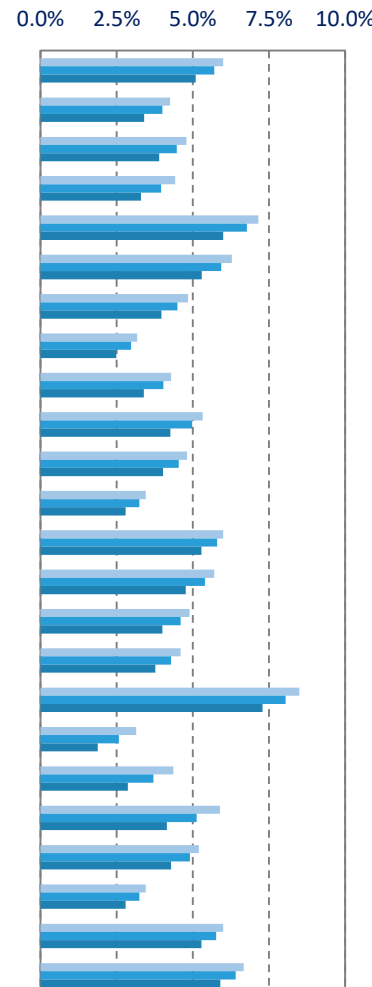
Asia/Pacific Long Term Traffic Forecast

Revenue Passenger-Kilometres, 2050 (RPK, billions)



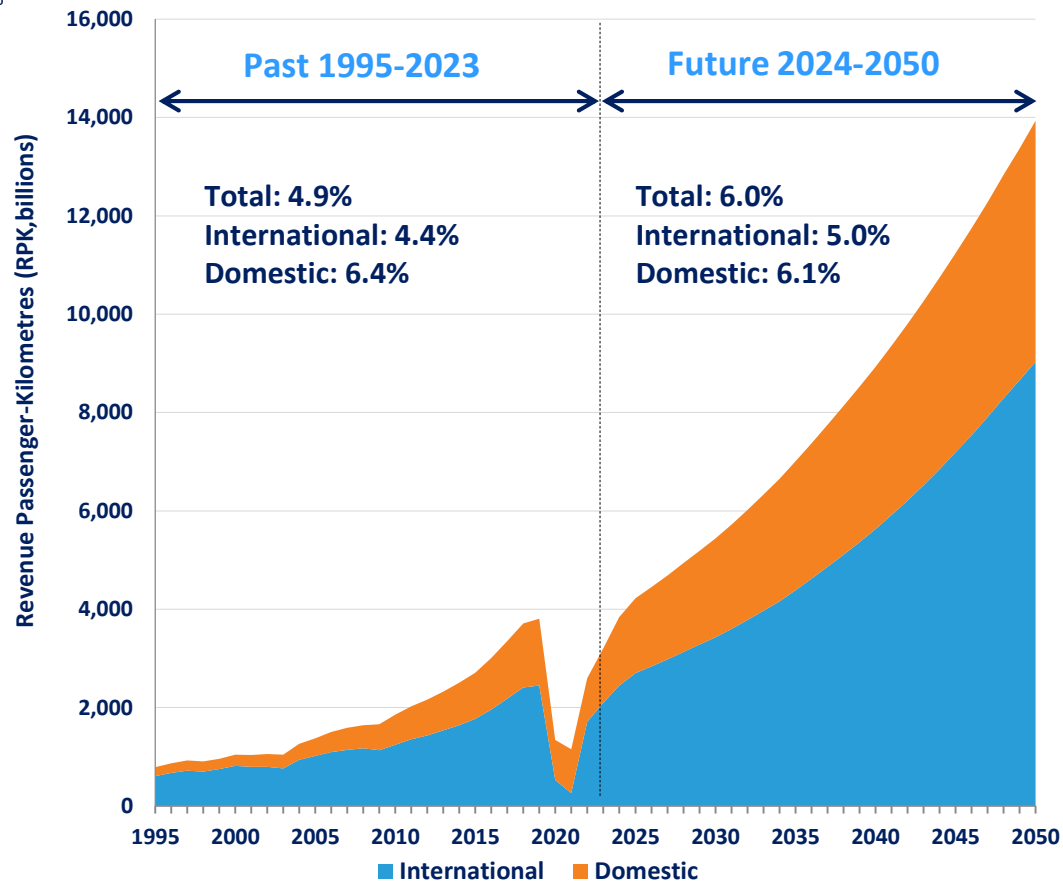
High Scenario Mid Scenario Low Scenario

CAGR 2024-2050



High Mid Low

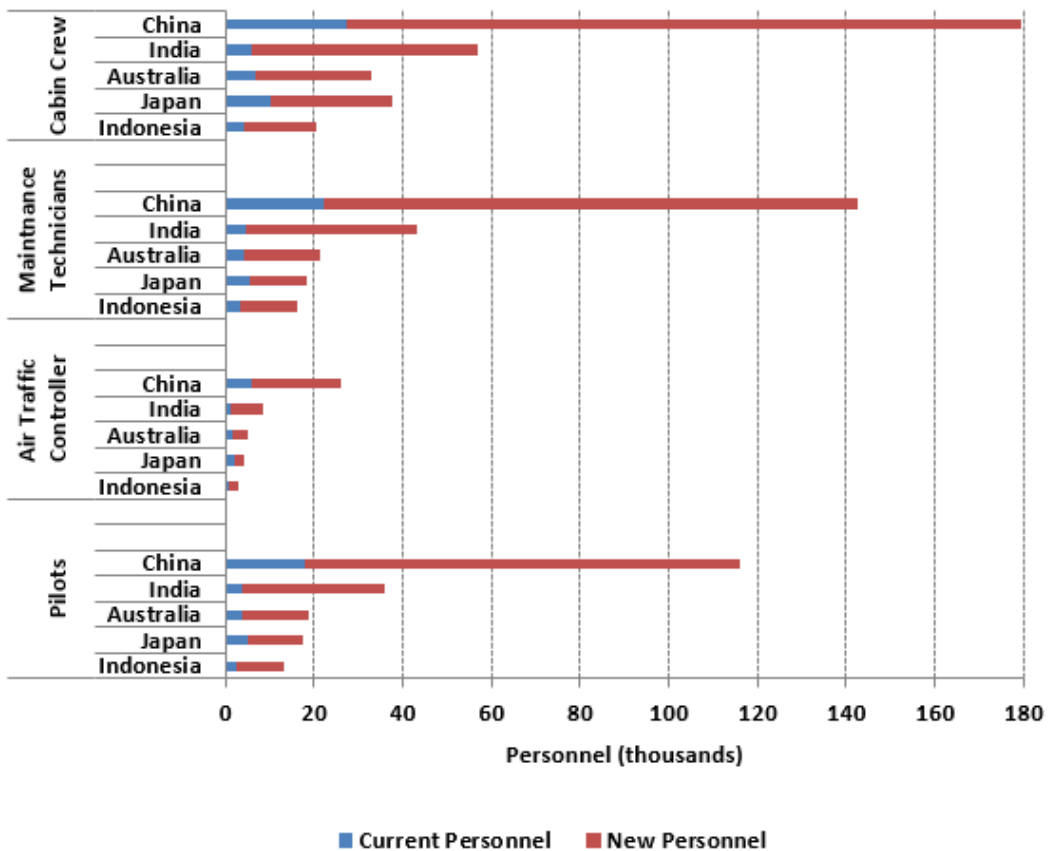
Asia/Pacific (Mid Scenario)



Source: ICAO Long Term Forecasts

Asia/Pacific Top 5 States driving the demand for new personnel

Personnel Forecast 2037



Pilots

Country	Flag	2017	2037 Total	2037 New
China		41,979	115,876	98,005
India		9,346	35,701	31,849
Australia		7,711	18,552	14,827
Japan		10,745	17,558	12,403
Indonesia		5,794	13,232	10,581

Air Traffic Controllers

Country	Flag	2017	2037 Total	2037 New
China		9,804	26,021	20,021
India		2,229	8,586	7,234
Australia		2,239	4,852	3,436
Japan		2,997	4,364	2,394
Indonesia		1,302	2,987	2,164

Maintenance Technicians

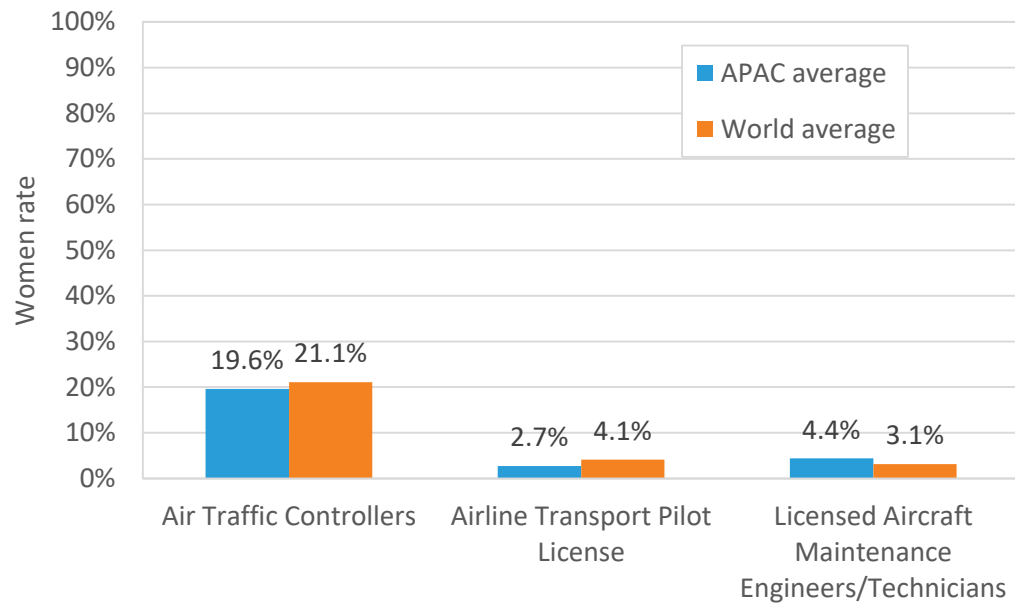
Country	Flag	2017	2037 Total	2037 New
China		52,062	142,617	120,468
India		11,404	43,358	38,663
Australia		8,851	21,189	16,909
Japan		11,724	18,206	12,644
Indonesia		7,176	16,210	12,930

Cabin Crew

Country	Flag	2017	2037 Total	2037 New
China		63,784	179,608	152,425
India		14,488	56,670	50,694
Australia		13,609	32,999	26,451
Japan		21,102	37,684	27,372
Indonesia		8,598	20,299	16,325

Asia/Pacific Aviation Personnel Gender Ratio

Women rate (2021 survey)



*Coverage rate by traffic volume: 80%

- **Women air traffic controllers are relatively less than global average.**
- **Women airline pilots are relatively less than global average.**
- **Women aircraft engineers/technicians are more than global average**



Overall women aviation personnel rate in the Asia/Pacific region in 2021 was 5.9% which is higher than the global level 4.9%

Source: Survey results on civil aviation licensed personnel and training capacity in 2021

Aviation Data and Analysis

The Fourth Meeting of the Aviation Data and Analysis Panel (ADAP/4)

✈ Successfully conducted at ICAO Headquarters in Montréal from 5 to 8 September 2023

Agenda items:

1. Report on the outcome of the 41st Session of the Assembly
2. Report on the Eleventh Session of the Statistics Division (STA/11)
3. Presentation of the Aviation Satellite Account (ASA) methodological framework
4. Review the methodologies and reporting with respect to the ICAO statistics programme
5. Development of methodologies to collect, process and analyze Big Data
6. Update of the long-term traffic forecasts
7. Examination of a proposed Global Aviation Competitiveness Index
8. Report of the on-going collaboration with the Universal Postal Union (UPU)
9. Statistical definition of non-scheduled all-cargo traffic
10. The results of licensed aviation personnel by gender

ICAO Traffic and Economic Dashboards

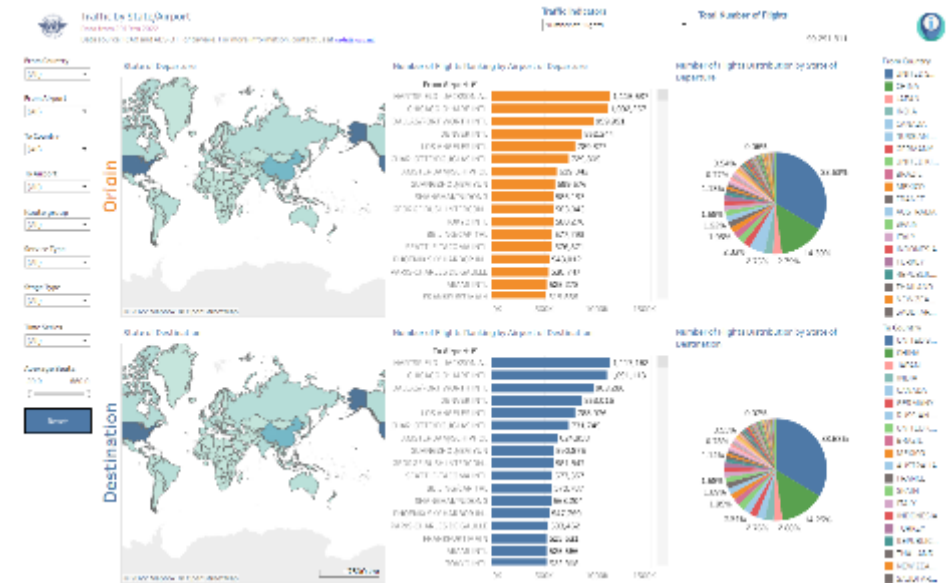
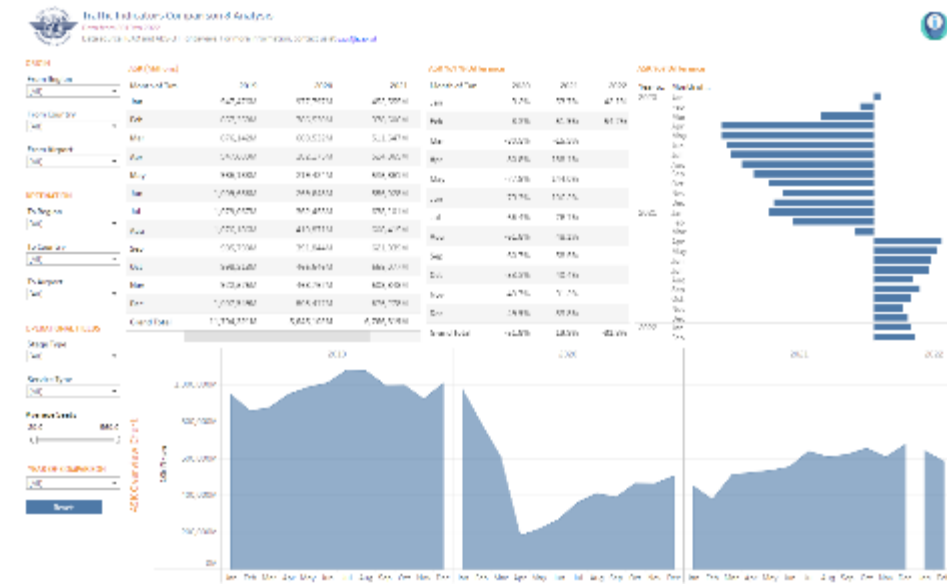
✈ Interactive dashboards developed using Tableau platform, which provide **visualization** and **customized querying capabilities**.

✈ Cover a **wide array of analytics** ranging from operations, fleet usage, passenger carried, Flight Information Region (FIR) traffic, and revenue impact on airlines, airports and air navigation services providers (ANSPs) at different levels of granularity.

✈ Each Member States has been provided with a free license.

✈ **Regional Personnel by Gender Analysis dashboard** provides the data of licensed women aviation personnel in the workforce.

<https://public.tableau.com/app/profile/icaodataanalytics/viz/RegionalPersonnelByGenderAnalysis/PersonnelbyGender>



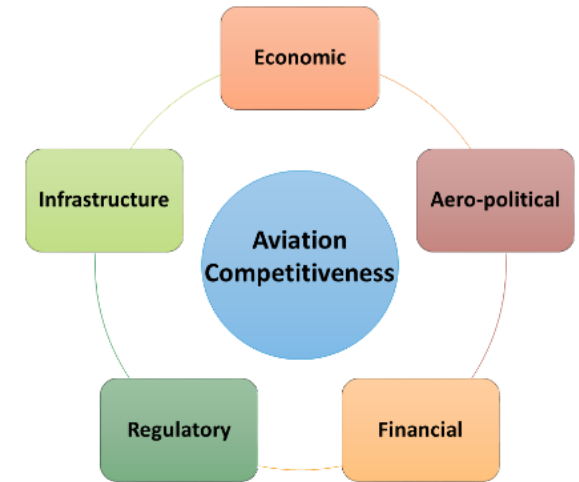
Development of Aviation Competitiveness Index

Objectives

- ✈ The Global Aviation Competitiveness Working Group (ACWG) agreed that the objective of the competitiveness index is **to measure the performance of the aviation of a State and its ability to create and maintain value from the sector.**

Progress

- ✈ **5 basic pillars** of the index were determined.
- ✈ Detailed indicators and metrics were determined by ADAP/4.
- ✈ Member States are invited to participate in **the next in-person meeting in Dubai**, the United Arab Emirates, from 15-17 November 2023.



Five basic pillars



Next meeting in Dubai

Development of International Logistics Constraints on E-commerce (ILC) WG

Objectives

- ✈ Joint collaborative work among ICAO-UN-UPU and Member States on measuring the constraints of international logistics for and the volume of air cargo, especially non-scheduled air cargo, including e-commerce.
- ✈ To provide a more accurate picture of constraints of air cargo movement.

Progress

- ✈ The ILC-WG meeting was held during ADAP/4.
- ✈ By the middle of 2024, an initial analysis of the quantification of e-commerce data will be complete.



ICAO's support to States in aviation data and analysis

ICAO Aviation Data and Analysis Seminar for Asia/Pacific

19

13-15 December 2023, ICAO APAC Office (Bangkok, Thailand)



ICAO

UNITING AVIATION

A UNITED NATIONS SPECIALIZED AGENCY



Seminar

- Provide an opportunity to learn about the new ICAO data and analytics solutions for monitoring and assessing key trends in air transport.



Dialogue

- Foster the dialogue between States, international organizations and aviation stakeholders on the use of aviation data and analysis to facilitate data-driven decision making.



Analysis

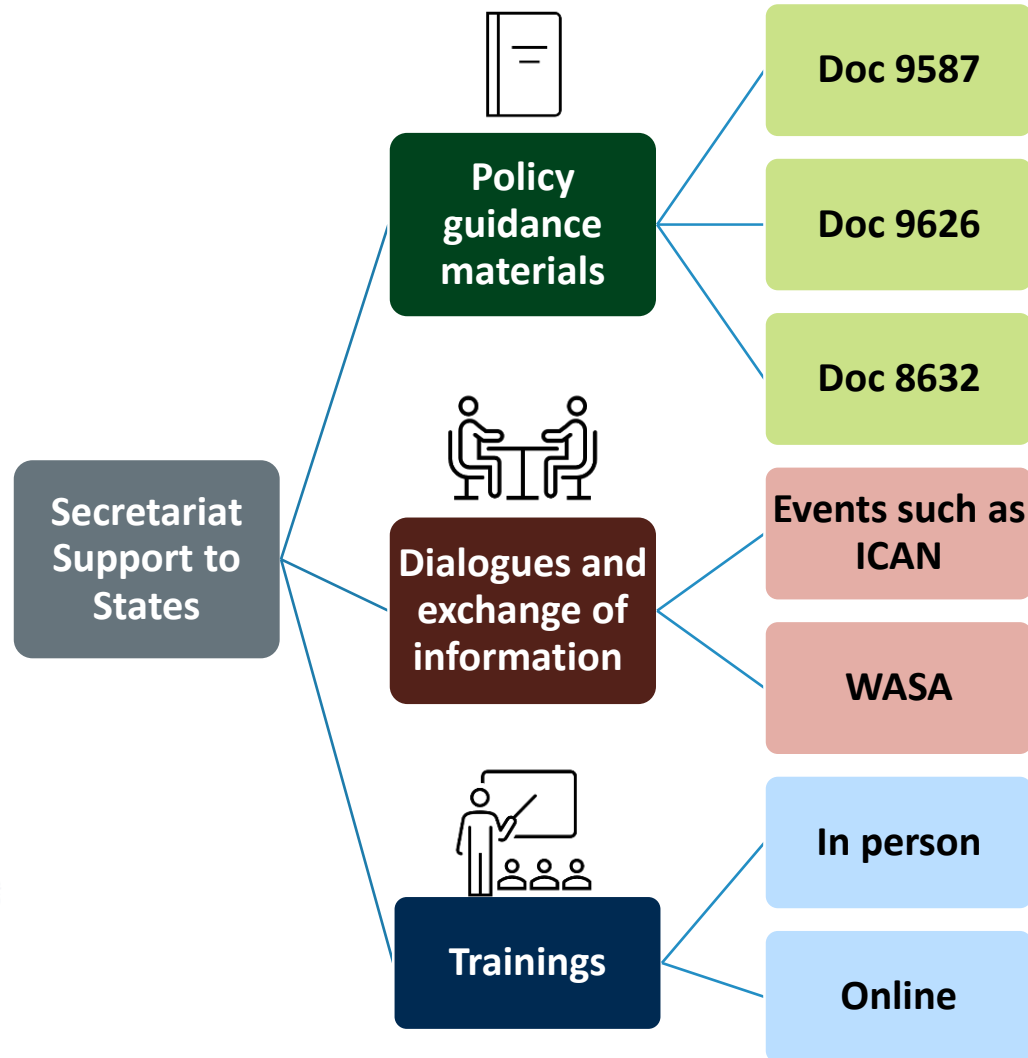
- Bring together all stakeholders to review the current situation and trends of aviation in the APAC Region.
- Progress in the area of a global aviation competitiveness index.

Please nominate participants not later than 5 December 2023

Air Transport Policy and Regulation

ICAO's Long-term Vision for International Air Transport Liberalization ²¹

✈ A41 - "Urges all Member States to give regard to, and apply, the **ICAO Long-term Vision for International Air Transport Liberalization** in policy making and regulatory practices"



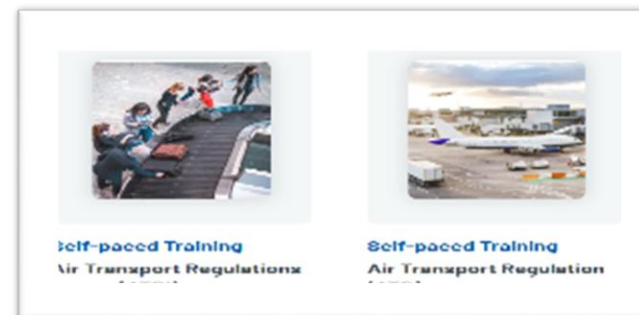
Doc 9587



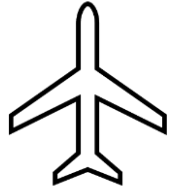
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Doc 8632

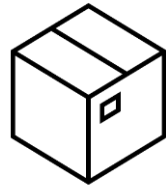


Ongoing works by the Air Transport Regulation Panel (ATRP)



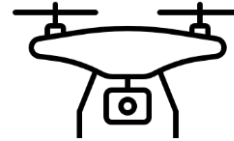
Airline ownership and control

- Address the remaining issues of concern on draft Convention on Foreign Investment in Airlines



Liberalization of air cargo

- Examination of whether there is a need for a specific agreement to further liberalize air cargo services



Unmanned aircraft

- Examination of whether there is a need to develop guidance for economic regulation of international operations of unmanned aircraft



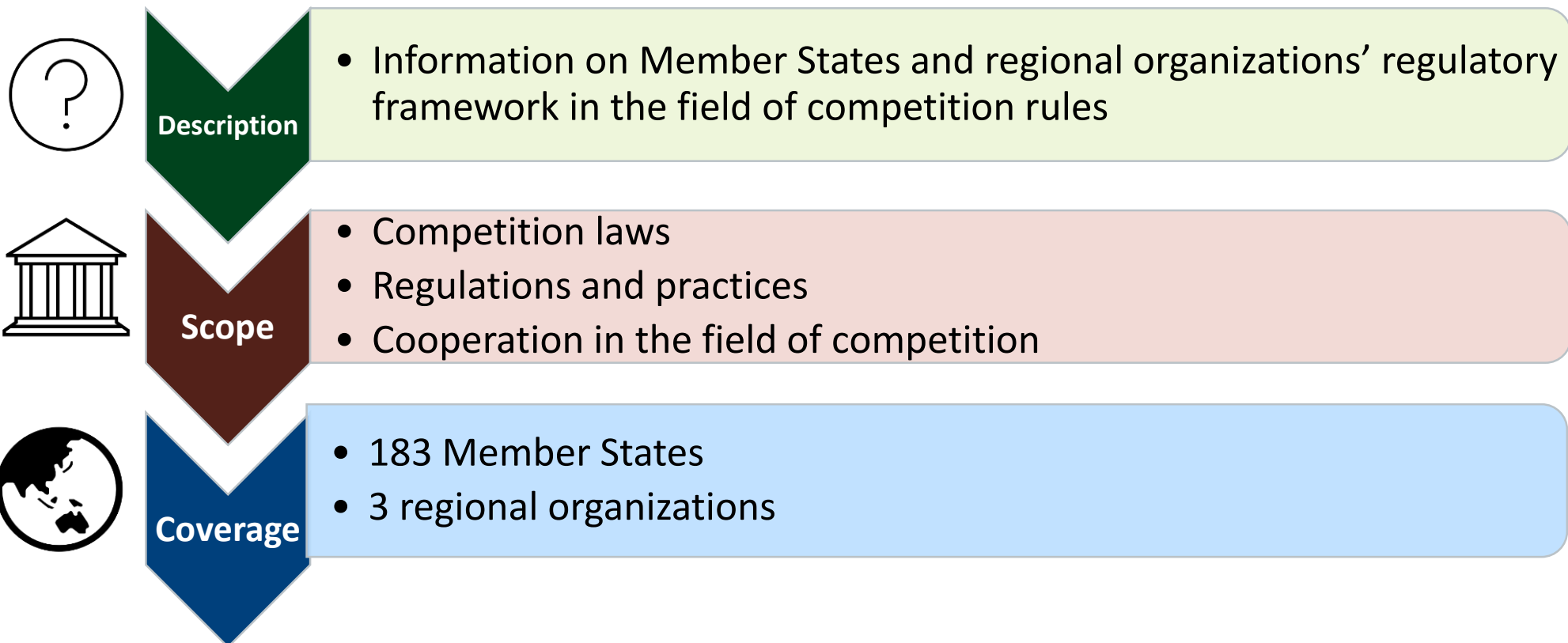
Response to crisis

- Develop guidelines to temporarily respond to international crises, whilst protecting the integrity of Air Services Agreements (ASAs)

Competition laws and policies

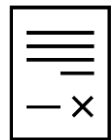
- ✈ A41 - "Urges Member States to develop **competition laws and policies** that apply to air transport, taking into account national sovereignty and to consider ICAO guidance on competition"

Compendium of Competition Policies and Practices



Consumer protection and Emergency Response Planning

- ✈ A41 - "Urges Member States that have not yet become parties to the **Montréal Convention of 1999** to give urgent consideration to so doing"
- ✈ A41 - "Urges Member States and concerned stakeholders to give regard to, and apply, the ICAO high-level, non-binding, non-prescriptive **core principles on consumer protection** in policy-making and regulatory and operational practices, including in case of massive disruptions impacting aviation, and to keep ICAO informed of the experience gained or issues encountered in their application"



Montréal Convention of 1999

- 139 Parties
- 36 States from APAC region



ICAO Compendium on Consumer Protection

- 189 Member States
- 4 regional organizations

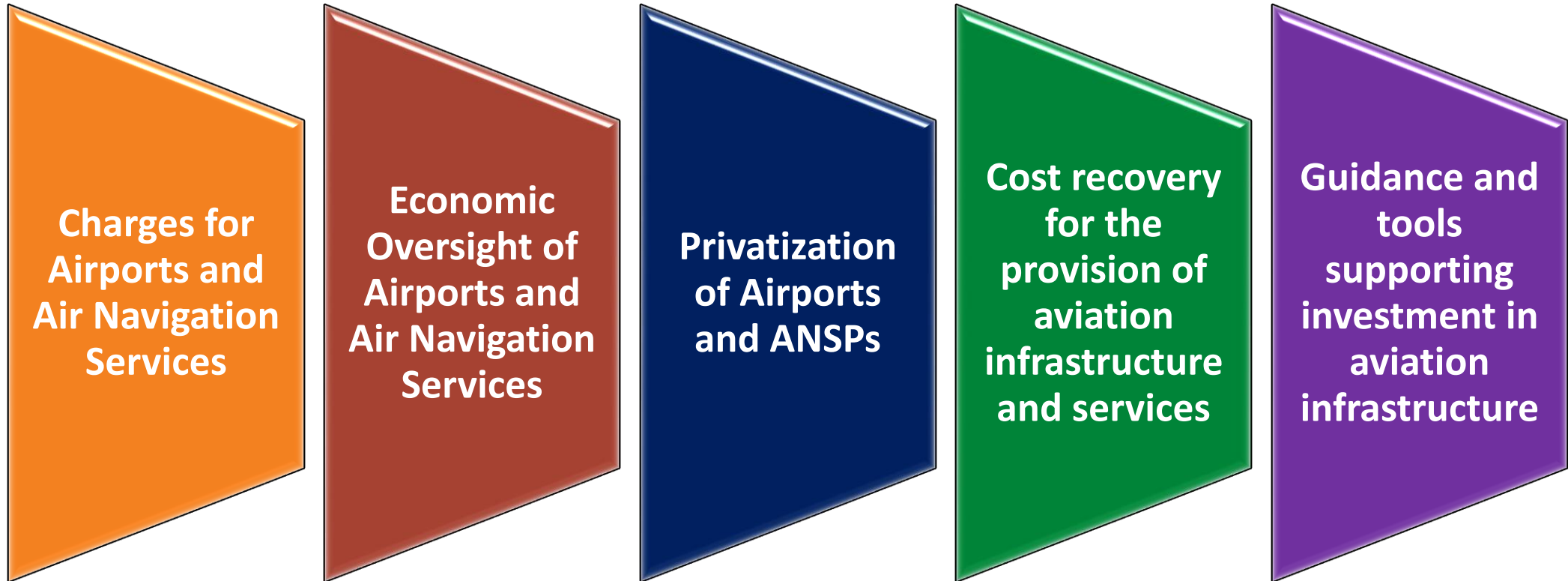


Compendia on Emergency Response Planning (ERP)

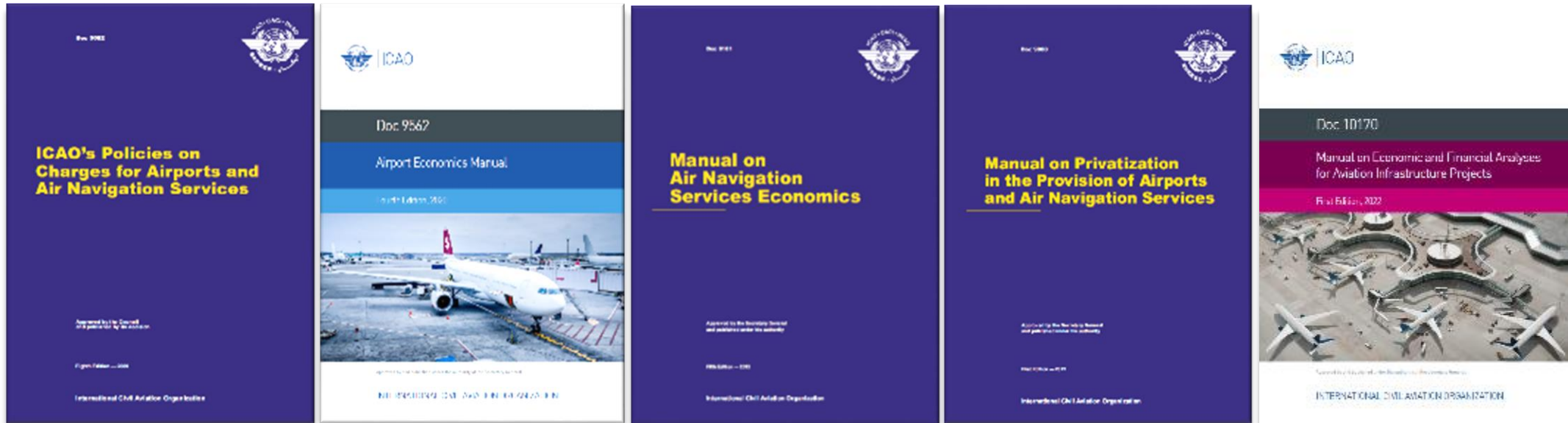
- 193 Member States
- States are encouraged to update the Secretariat

Infrastructure Management

Infrastructure Management



Harmonizing global regulatory framework by developing policies and guidance



Doc 9082

Doc 9562

Doc 9161

Doc 9980

Doc 10170

- **Doc 9082** – ICAO's Policies on Charges for Airports and Air Navigation Services
- **Doc 9562** – Airport Economics Manual
- **Doc 9161** – Manual on Air Navigation Services Economics

- **Doc 9980** – Manual on Privatization in the Provision of Airports and Air Navigation Services
- **Doc 10170** – Manual on Economic and Financial Analyses for Aviation Infrastructure Projects

Outcome of the Eighth Joint Meeting of the Airport Economics Panel and the Air Navigation Services Economics Panel (AEP-ANSEP/8)

- ✈ Virtual panel meeting held from 29 November to 3 December 2021 (AEP-ANSEP/9 will be held in October 2023).
- ✈ Review of ICAO's policies in relation to modifying Air Navigation Services Charges for Improving Environmental Performance
- ✈ Review of ICAO's policies and guidance on airport and air navigation services economics
- ✈ Sustainable funding for civil aviation authorities and States' oversight functions
- ✈ Guidance on cost recovery for the provision of MET services and space weather information
- ✈ Economic aspects of the activities regarding charging for the operations of the unmanned aircraft system (UAS)
- ✈ Sustainable funding for CAAs and oversight functions

AEP-ANSEP/9 is taking place in Montreal from 17 to 19 October 2023

Opportunities and challenges in the Asia Pacific region

Opportunities

Solid recovery of air traffic from the COVID-19 pandemic

Continued traffic growth of the region

Ongoing liberalization efforts

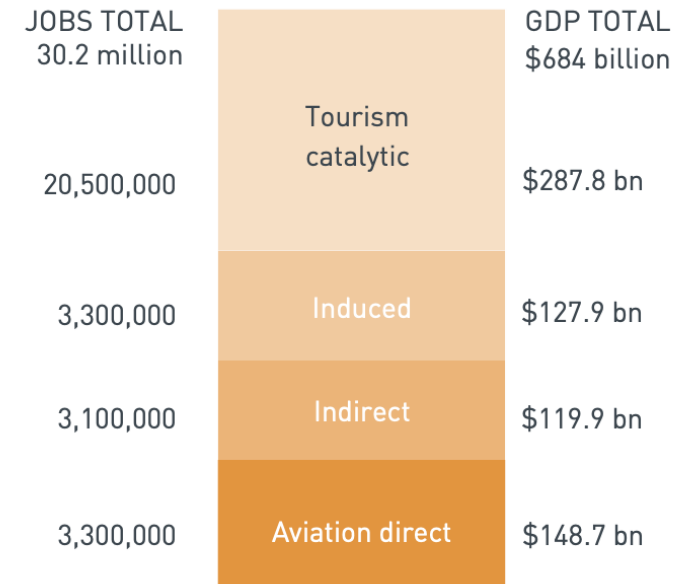
Challenges

Infrastructure deficiencies

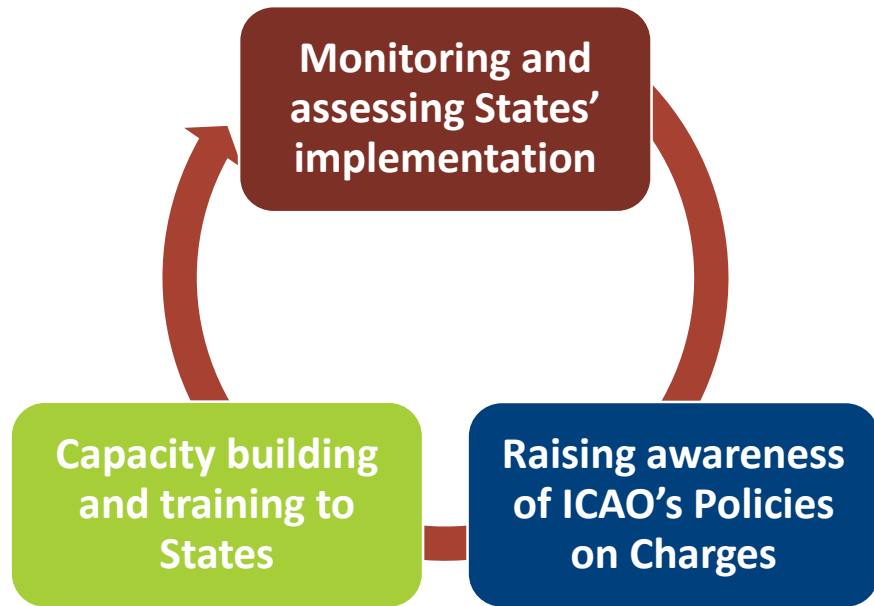
Excessive charges and taxes on air transport

Proliferation of tourism taxes in the region

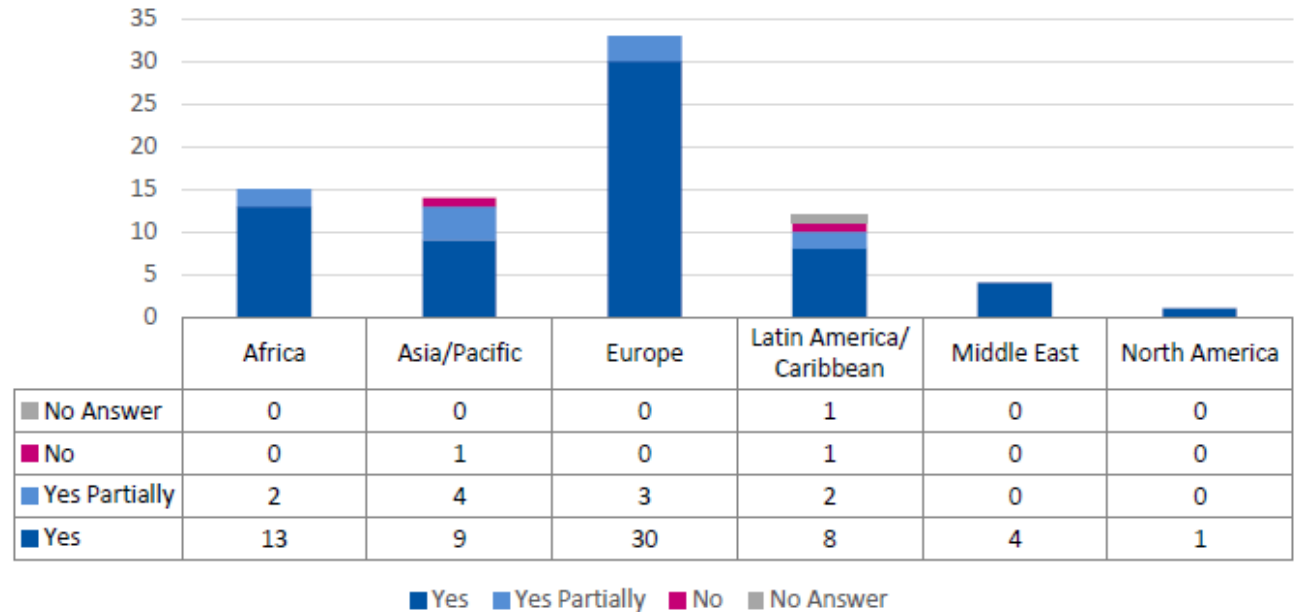
Total jobs and GDP supported by aviation in Asia and Pacific, 2016



Enhancing the implementation of ICAO's policies on charges



States' implementation of ICAO's policies on charges for airports and air navigation services (2020)



ICAO's support to States

ICAO's capacity building support to States

Online training

Air Transport Regulation
online course

Air Transport Regulation
Issues online course

Air Transport Economics
online course

Classroom/Virtual training

**Joint ICAO-ACI training
on Airport User
Charges**



Thank You!