



ICAO

**The Fourth Meeting of the Aerodromes Operations and Planning Sub-Group (AOP/SG/4)**

*Video Teleconference, 10 to 13 November 2020*

**Agenda Item 2: Review Outcome of Relevant Meetings**

**ACTION ITEMS FROM 56<sup>TH</sup> CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS**

(Presented by the Secretariat)

**SUMMARY**

This paper presents relevant information from the 56<sup>th</sup> Conference of Directors General of Civil Aviation Asia and Pacific Regions (DGCA/56) held in Kathmandu, Nepal from 19 to 23 August 2019.

**1. INTRODUCTION**

1.1 The 56<sup>th</sup> Conference of Directors General of Civil Aviation Asia and Pacific Regions (DGCA/56) was held in Kathmandu, Nepal from 19 to 23 August 2019.

**2. DISCUSSION**

2.1 The Theme Topic of DGCA/56 was “*Harmonising Efforts to Meet the Capacity Constraints*”.

2.2 DGCA/56 received 60 Discussion Papers and 62 Information Papers under its Agenda Items.

Agenda Item 9a: Beijing Declaration Commitments – Certify all aerodromes used for international operations by 2020

2.3 During the plenary session of DGCA/56, the Secretariat delivered a presentation (**Attachment A**) on the Status of APAC States vis-à-vis the Beijing Declaration Commitments.

2.4 Subsequent to the presentation, the Conference was divided into 2 breakout workshops where one of the workshops discussed the follow up actions and way forward for the Beijing Declaration Commitments. The workshop reinforced the **Action Item 55/42 from DGCA/55** and urged States that have yet to certify aerodromes used for international operations to effectively implement the aforementioned action item.

2.5 The outcomes of the workshop were presented to the Plenary Session (**Attachment B**), with the following Action Item endorsed:

Discussion Paper No.	Action Item	Agenda Item 9a – Beijing Declaration Commitments
DP/1a/9 DP/12a/2	Action Item 56/5	The Conference urged States/Administrations to: a) accelerate progress under the Beijing Declaration, provide customized assistance to the Pacific Island States, and work with ICAO on its technical assistance programme and capacity building activities for the region; ... [other sub-items omitted]

Agenda Item 6: Economic Development of Air Transport

2.6 IATA presented its best practices (**Attachment C**) relating to airport infrastructure capacity and capital investment planning, drawing from its global engagement experience to facilitate engagements with stakeholders in the decision making process to better meet the projected growth in traffic.

2.7 Consider the discussion paper from IATA, DGCA/56 endorsed the following Action Item:

Discussion Paper No.	Action Item	Agenda Item 9a – Beijing Declaration Commitments
DP/6/3	Action Item 56/24	The Conference encouraged States/Administrations to: a) ensure an airport master plan is developed for each airport, and reviewed periodically with participation from stakeholders in line with various guidance issued by ICAO from time to time; b) recognize the need to address the infrastructure capacity constraint issue urgently through operational efficiencies and new infrastructure when required; c) if privatization is pursued, consider the balanced concessions framework proposed by IATA and follow the guidance issued by ICAO in this regard; and d) collaborate with airlines and key stakeholders.

Action Items agreed by DGCA/56

2.8 DGCA/56 identified 36 Action Items. States/Administrations will be requested to provide ICAO APAC Office with a status report of implementation of the Action Items at an appropriate time before DGCA/57.

2.9 The list of Action Items arising from DGCA/56 is available at **Attachment D**.

Theme Topic for the DGCA/57

2.10 The Theme Topic for the 57<sup>th</sup> Conference of DGCAs will be ***“Promoting ICAO Gender Equality Programme in conjunction with Next Generation of Aviation Professionals (NGAP) Initiative”***. DGCA/57 is currently scheduled to be held in the first quarter of 2021 in Dhaka, Bangladesh. However, the schedule is subject to change due to the ongoing pandemic.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) urge State CAAs and aerodrome operator to take necessary actions in accordance with Action Item 56/5 a) and 56/24 a) and b) arising from DGCA/56.

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## Agenda Item 9a: Beijing Declaration – Follow up and way forward

### Status of APAC States vis-à-vis Beijing Declaration Commitments

Plenary Session

Raphael Guillet

*Chief of ICAO Asia and Pacific Regional Sub-Office (APAC RSO)*

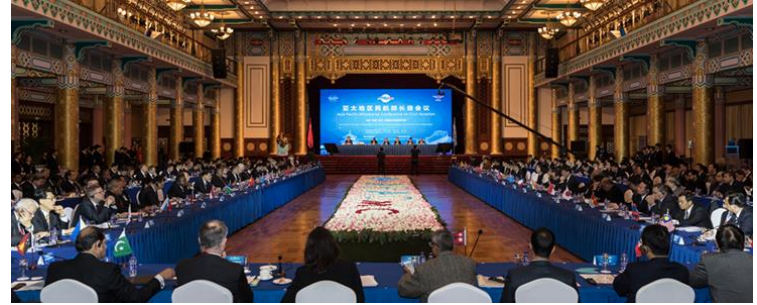


Kathmandu, Nepal, 21 August 2019



## First Asia/Pacific Ministerial Conference on Civil Aviation

- ✈ Held in Beijing, China from 31 January to 1 February 2018.
- ✈ Organized by ICAO and hosted by the Civil Aviation Administration of China (CAAC).
- ✈ Attended by 32 Member States of the APAC Region, 4 Member States (France, Russian Federation, United Kingdom and United States) of other Regions and representatives of 6 international organizations.





## Highlights

- ✈ Main challenges in aviation safety and air navigation capacity and efficiency in the Region were highlighted.
- ✈ Main outcome of the conference was the endorsement of the 'Declaration on Asia/Pacific Ministerial Conference on Civil Aviation'.
- ✈ Unanimously agreed by all the Delegations.





## Intended Benefits of the Declaration

- ✈ First high-level Regional Commitment on Safety & ANS
- ✈ Benchmark for States to assess progress
- ✈ Strong support to the Civil Aviation Authorities
- ✈ Demonstrate High level commitment to public, industry and investors

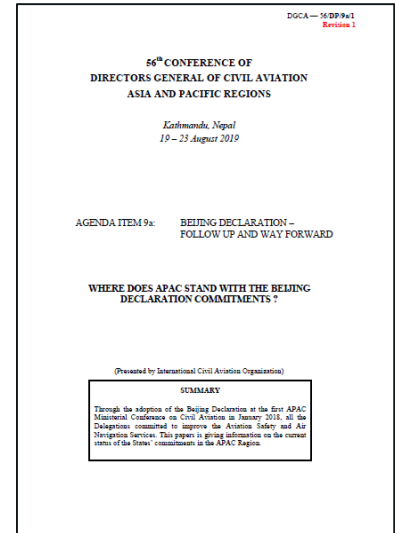


# Status of APAC States vis-à-vis Beijing Declaration Commitments

- ✈ 1. Aviation Safety
- ✈ 2. Air Navigation Services
- ✈ 3. Accident Investigation

➤ All details are given in the DP DGCA-56/DP/9a/1

➤ Status given in June 2019 and comparison with Jan 2018





# Aviation Safety

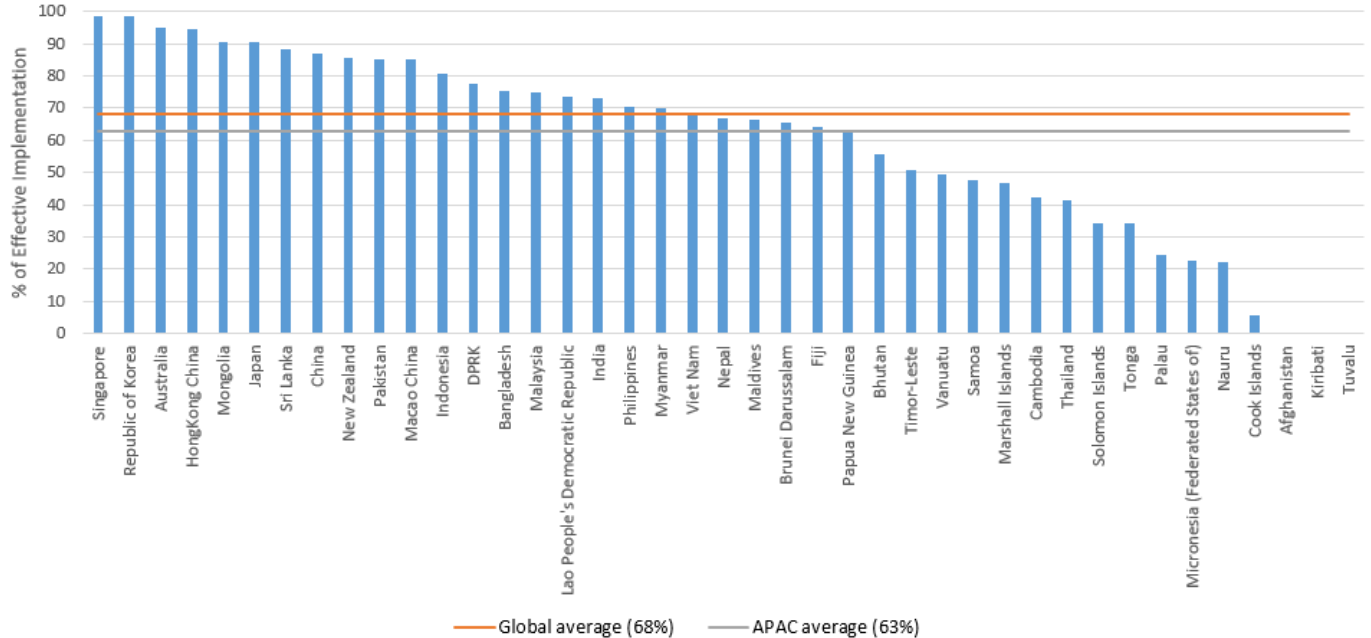
## a) USOAP Effective Implementation (EI)



USOAP EI ≥ global average by 2022



iSTARS (USOAP Data Tables Implementation Indicators)





# Aviation Safety

## a) USOAP Effective Implementation (EI)

✈ Progress since January 2018 :

✈ EI Global average :  
from 65% to 68%

✈ EI APAC average :  
from 60% to 63%

State / EI %	Jan 2018	Jun 2019	USOAP conducted
Bhutan	39.1	55.6	Aug 2018
Cambodia	37.6	42.4	Dec 2018
India	65.7	72.9	Nov 2018
Myanmar	65.9	70.0	Dec 2018
Papua New Guinea	51.1	63.3	Mar & Aug 2018
Sri Lanka	87.4	88.4	Jun 2018

Note : Thailand : ICVM completed in May 2019. Report not published.



# Aviation Safety

## b) State Safety Programme (SSP)

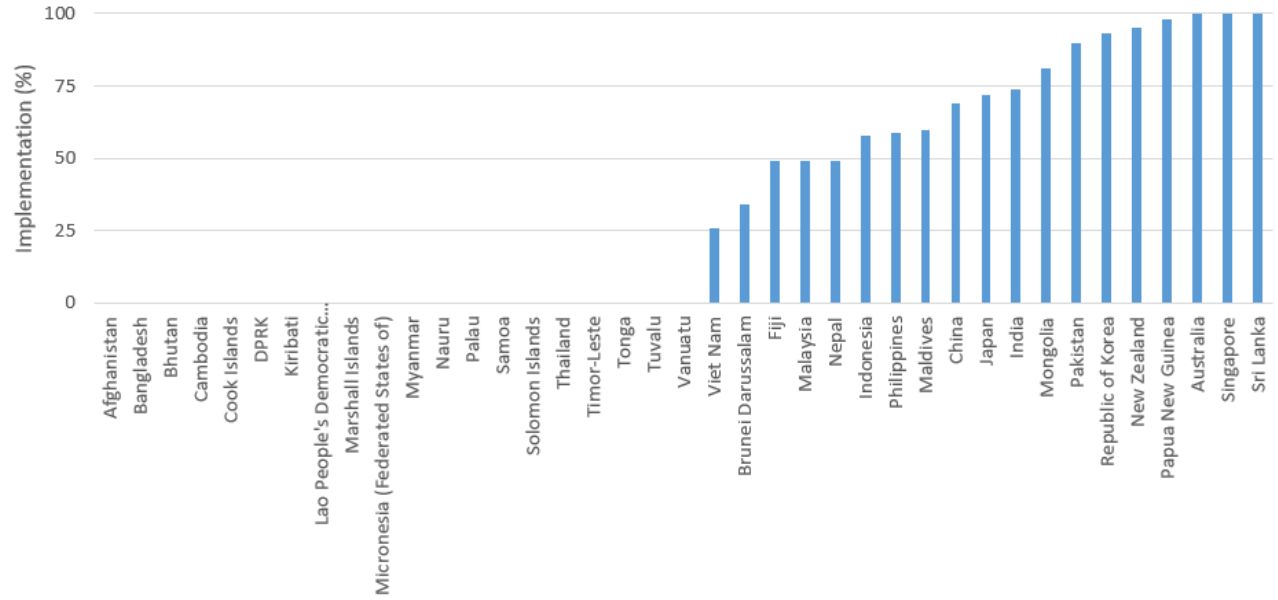


Implement an effective SSP by 2025



iSTARS (SSP Gap Analysis - SMM 4th Ed.)

APAC States having implemented SSP





## Aviation Safety

### c) Significant Safety Concerns (SSCs)



Endeavour not to have any Significant Safety Concerns (SSCs) under the USOAP Continuous Monitoring Approach (CMA), and to resolve any future SSCs within the time frame agreed with ICAO

Only one State has a SSC

No SSC in Jan 2018



# Aviation Safety

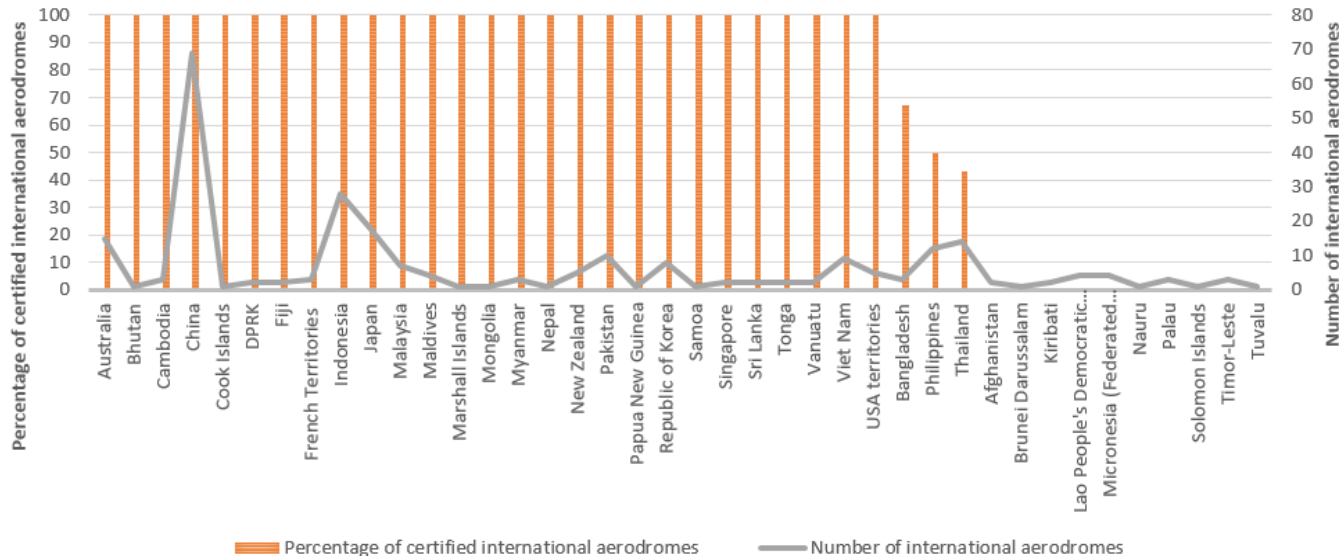
## d) Certification of international aerodromes



Certify all aerodromes used for international operations by 2020



Aerodromes Operations and Planning Sub-Group (AOP/SG/3)



In January 2018, 83 % of aerodromes used for international operations were certified. Today it is 85%.



## Air Navigation Services

### a) Aeronautical Information Management (AIM)



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



AIS-AIM Implementation  
Task Force  
(AAITF/13 & 14)

- Phase I (Consolidation existing SARPS)
  - immediate implementation
  - current status = 73 % ( last year 71%)
- Phase II (Going Digital)
  - target November 2019
  - current status = 40 % ( last year 35%)

Then Phase III (including SWIM, November 2025)



# Air Navigation Services

## b) Performance Based Navigation (PBN)

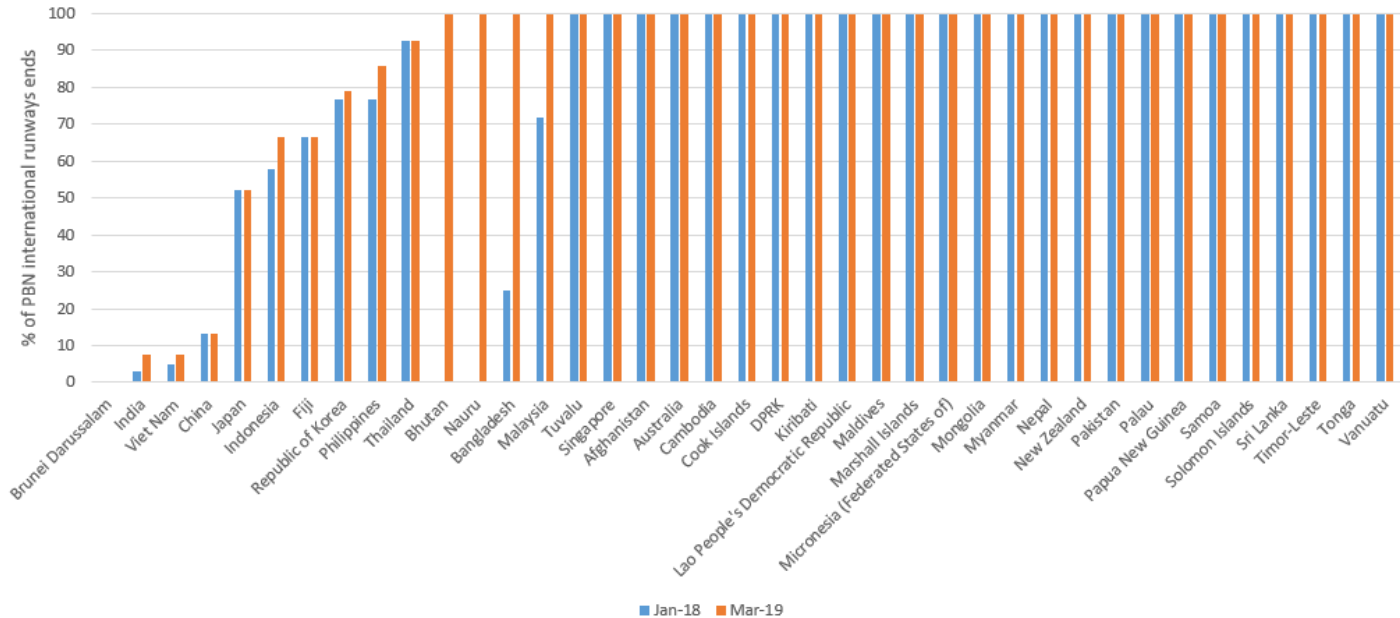


PBN implementation by 2022



% PBN intl runway ends iSTARS and Jeppesen (March 2019)

PBN implementation at international aerodromes





## Air Navigation Services

### c) Ground telecommunication infrastructure



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



CNS Meeting updates received

- ✈ 12 cities in 7 States/Administrations have implemented operations of the Common aeronautical VPN private network (CRV): Australia, Fiji, Hong Kong China, Japan, New Zealand, Philippines and USA;
- ✈ Singapore is currently conducting installation;
- ✈ Republic of Korea signed service contract on 19 Aug.19;
- ✈ Additional 5 States (Bhutan, China, PBN, Thailand and India) have plan to join CRV in 2019;
- ✈ Another 3 States/Administration (France-New Caledonia and Polynesia, Indonesia and Malaysia) have plan to join CRV in 2020.



# Air Navigation Services

## d) Civil Military cooperation



An enhanced level of civil/military cooperation by 2020



Seamless ATM reporting



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.



## Air Navigation Services

### e) Surveillance capability



Enhanced surveillance capability including ADS-B technology by 2022



iSTARS / Seamless ATM reporting

26 States/Administrations installed ADS-B ground stations and

10 States issued ADS-B mandate

4 States used ADS-B for separation and others for awareness, gap filling and redundancy.



## Air Navigation Services

### f) Air Traffic Flow Management (ATFM) / Collaborative Decision Making (CDM)



ATFM/CDM  
implementation for high  
density airports by 2022



Seamless ATM reporting (80),  
APAC A-CDM Implementation  
Survey and APA-CDM/TF/4  
Meeting

Two indicators have been selected:

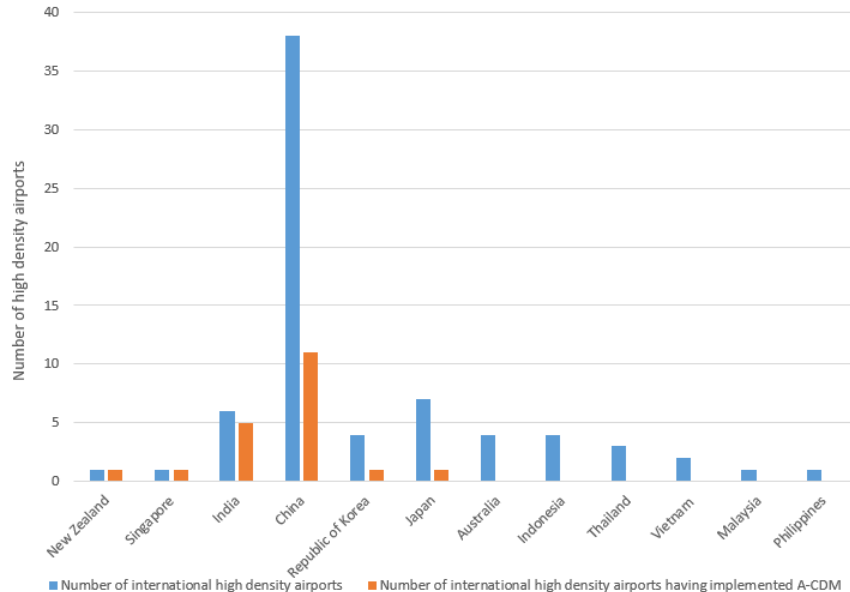
- Number of international high density airports with Airport-CDM implemented, and
- High density FIRs and FIRs supporting Major Traffic Flows and high density aerodromes with ATFM/CDM implemented



# Air Navigation Services

## f) Air Traffic Flow Management (ATFM) / Collaborative Decision Making (CDM)

Status of A-CDM Implementation at International High Density Airports in APAC



Total number of international high density airports = 72

In Jan 2018, 15 of them had implemented A-CDM. Now, it is 20.

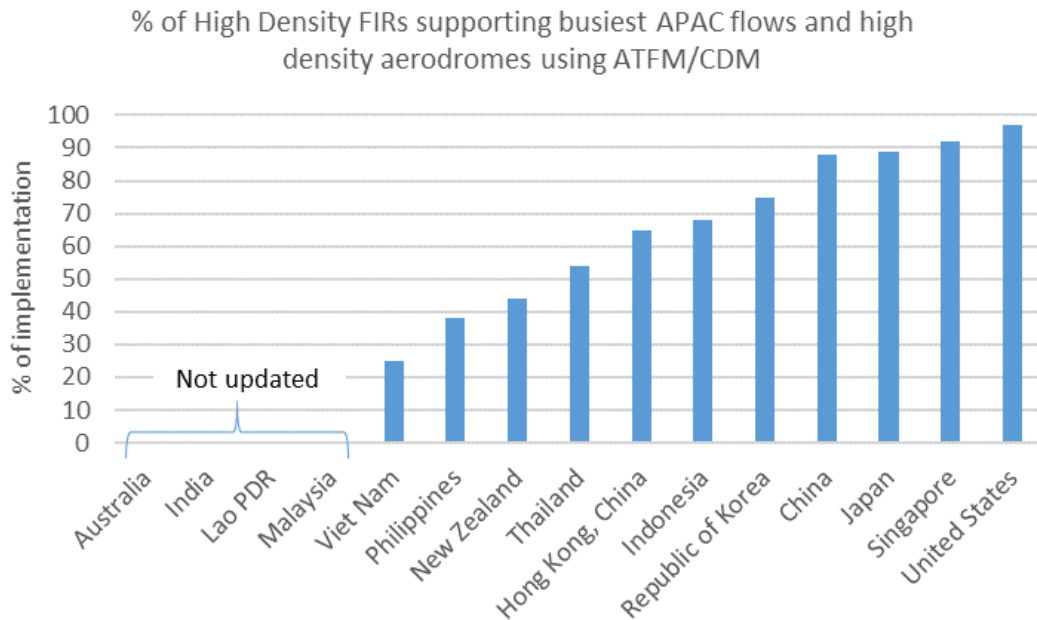
24 have planned to implement A-CDM before end of 2020.



# Air Navigation Services

f)

## Air Traffic Flow Management (ATFM) / Collaborative Decision Making (CDM)





## Air Navigation Services

### g) National Air Navigation Plan



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



Survey in 2019

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, Vietnam and Philippines.



# Accident Investigation

## a) Independent accident investigation authority



In accordance with the Chicago Convention, commit to **establish an accident investigation authority** that is **independent** from State aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation or where appropriate develop a bilateral, sub-regional or regional partnership to support the establishment of accident investigation capabilities to serve the region or sub-region

- ✈ PQ 6.005 (CE-1): Does the primary legislation provide for the independence of the investigation process and of the authority in charge of conducting aircraft accident and serious incident investigations?
- ✈ PQ 6.101 (CE-3): Has the State established an investigation authority with a clear and documented structure and in a manner that ensures independence from State aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation?



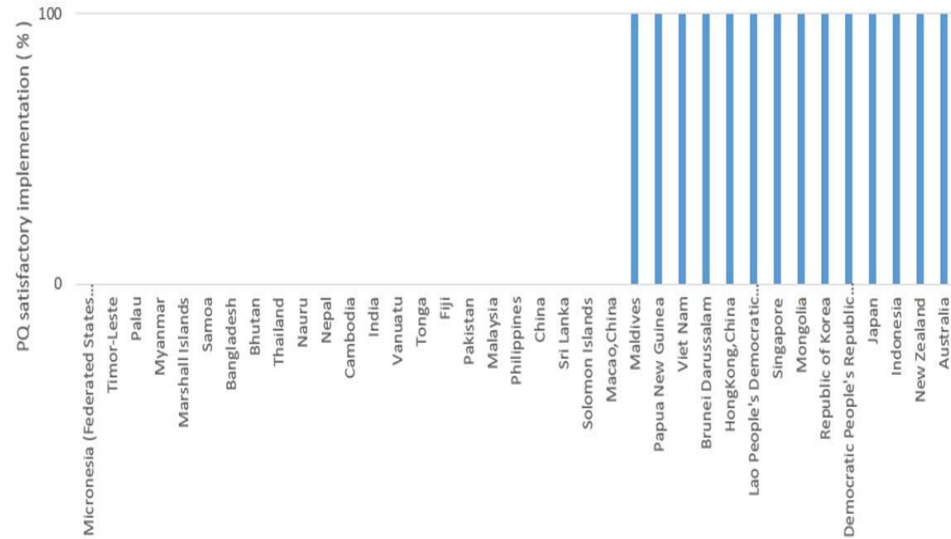
iSTARS



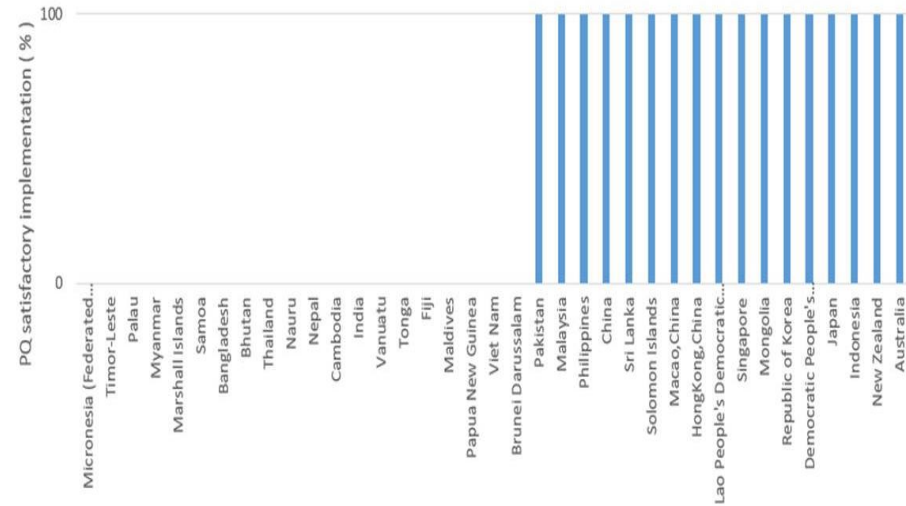
# Accident Investigation

## a) Independent accident investigation authority

PQ 6.005 (CE 1: primary legislation to provide for the independence)



PQ 6.101 (CE-3 : clear and documented structure that ensures independence)





## Implementation of Beijing Declaration commitments

- ✈ Progress is noted and States are invited to continue their efforts to comply with the Beijing Declaration Commitments
- ✈ States need to ensure that correct data is transmitted to the Regional Office as it will be shown at the next Ministerial Conference in 2020
- ✈ Commitments will be reviewed once new GANP/GASP are endorsed by the 40<sup>th</sup> ICAO Assembly



**Now**

## Breakout Workshop

✈ Room : Madhavi Room

✈ Time : 11:30 – 13:30



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and Caribbean  
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Mexico City

South American  
(SAM) Office  
Lima

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Headquarters  
Montréal

Western and  
Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
(APAC) Office  
Bangkok



THANK YOU

[rguillet@icao.int](mailto:rguillet@icao.int)



# Outcomes of the Breakout Workshop

## Agenda Item 9a: Beijing Declaration – Follow up and way forward

## Status of APAC States vis-à-vis Beijing Declaration Commitments

Presented by the Rapporteur of the Group

Kathmandu, Nepal, 21 August 2019



## Participations

- ✈ 16 States
- ✈ 5 International organizations



## Discussion

- Due to the time constraints, the breakout workshop focused only on :

### Aviation Safety

- USOAP Effective Implementation (EI)
- Significant Safety Concerns (SSCs)
- State Safety Programme (SSP)
- Certification of aerodromes used for international operations



## USOAP EI and SSCs

- ✈ The breakout workshop session recommends that :
  - States to apply political will to aviation safety regulation and oversight by linking to national priorities and plans supported by economic benefits
  - States to develop policies and a National Aviation Safety Plan (NASP), including the implementation of a State Safety Programme (SSP), developed with and endorsed by high-level in Government



## USOAP EI and SSCs

- States to establish an appropriately organized, funded and empowered civil aviation system, structured to effectively fulfil the tasks that it is expected to undertake
- States to have specific action plans and perform continuous self-monitoring, using USOAP tools and supported by ICAO APAC RO, COSCAPs and PASO, and request ICAO for more regular validations under USOAP
- States to use regional and sub-regional collaboration mechanisms and bilateral partnerships for sharing resources and the assistance required with implementation



## State Safety Programme (SSP)

Main challenges faced by States :

- ✈ Requiring effective policy/legislation in place with supporting specific operating regulations
- ✈ Some States require clearer understanding of how to initiate and implement SSP (scalability).
- ✈ Understanding inter connectivity between CEs of the SSO and the SSP components.



## State Safety Programme (SSP)

Recommendations :

- ✈ ICAO CAT missions specific to SSP
- ✈ Enhance States' collaboration, share lessons learned and successes.



## Certification of aerodromes used for international operations

✈ The breakout workshop session reinforced the 55th DGCA Conference Action 42 related to this subject :

Recognising the Ministers' commitment to certify all aerodromes used for international operations by 2020 through the *Beijing Declaration*, the Conference urged:

- a) Aerodrome operators to **prepare, apply for and maintain the certification** for all aerodromes used for international operations;
- b) States to **establish an Aerodrome Certification Plan**, in accordance with their national regulations, incorporating the identification of gaps and implementation of solutions to overcome those gaps, including the safety risk assessment and development of mitigation measures in areas of non-compliance, and allocate the necessary resources to implement the plan to meet the 2020 target;
- c) States, if and when required, to **request ICAO (Regional Office, COSCAPs, TCB and GAT) and PASO** support for the implementation of the aerodrome certification plan of their respective States including training and technical assistance in aerodrome certification; and
- d) International Organizations, Champion/Volunteer States, Industry and other Aviation Agencies to **support States and aerodrome operators in the implementation of the Aerodrome Certification Plans**.

✈ States that have yet to certify aerodromes used for international operations to effectively implement the above action



## Independent accident investigation authority

✈ The breakout workshop session recommends that :

The Beijing Ministerial Declaration Section 3 on AIG should be revised at the next opportunity based on the current applicable ICAO provisions and guidance (obligation for each State to establish a permanent independent investigation authority), and with the addition of a target timeframe for implementation.



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## Proposed Action Item 56/.....

Recognizing the Ministers' commitment to implement the Beijing Declaration, and  
Noting the progress in implementing these commitments in the APAC region,  
the Conference encouraged the States/Administrations to :

- continue their efforts to achieve the Beijing Declaration target dates;
- take into consideration the recommendations from the breakout session;
- ensure that correct data are reported to the Regional Office in the perspective of the next Ministerial Conference in 2020;
- pay close attention to the outcomes of the 40<sup>th</sup> Assembly and its impact on the Aviation Safety and Air Navigation Services.



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(EUR/NAT) Office  
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(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
(APAC) Office  
Bangkok



THANK YOU

**56<sup>th</sup> CONFERENCE OF  
DIRECTORS GENERAL OF CIVIL AVIATION  
ASIA AND PACIFIC REGIONS**

*Kathmandu, Nepal*

*19 – 23 August 2019*

**AGENDA ITEM 6: ECONOMIC DEVELOPMENT OF  
AIR TRANSPORT**

**ASIA PACIFIC AIRPORT INFRASTRUCTURE CAPACITY AND  
CAPITAL INVESTMENT PLANNING**

(Presented by International Air Transport Association)

**SUMMARY**

According to IATA's 20-year air passenger forecast, Asia Pacific will be the biggest driver of demand with more than half of the new passenger traffic coming from the region. It is disconcerting however that infrastructure capacity is already at or nearing breaking point at many major airports in the region.

This paper presents industry best practices relating to airport infrastructure capacity and capital investment planning, drawing from IATA's global engagement experience on this subject to facilitate engagements with stakeholders in the decision-making process to better meet the projected growth in traffic.

## ASIA PACIFIC AIRPORT INFRASTRUCTURE CAPACITY AND INVESTMENTS PLANNING

### 1. INTRODUCTION

1.1 Over the next 20 years, the expected growth in the frequency of air travel of the average citizen will occur in the emerging markets.

1.2 By 2038, seven out of the top 10 largest air transport markets globally will be from the Asia Pacific region (China, India, Indonesia, Philippines, Vietnam, Thailand and Malaysia) in addition to Mexico, Brazil and Russia.

1.3 The number of trips per person is forecast to increase by 4-8% per year for many emerging countries but could be as high as 10-11% per year in the case of China and India. In contrast, trip frequency is likely to grow much more slowly, at just 1-2% per year in the developed countries.

1.4 Asia Pacific is expected to see an additional 2.8 billion passenger journeys in 2038 vs 2018 with the highest compound average growth rate of 5.2% compared to other regions.

1.5 An analysis by IATA based on publicly available data found that infrastructure capacity is already critical at many major airports in the region. More than 65% of the top 100 airports in the region monitored by IATA through our Airport Capacity Database have already exceeded their terminal capacity. A more in depth analysis of key major airports in the region in the same database found that 69% are already operating beyond their terminal capacity, and by the end of 2020 this figure will increase to 81%. This illustrates the challenge and trend that needs to be addressed, however, it should in no way be interpreted that the only solution is to build expensive new capacity before first ensuring existing infrastructure is being used as efficiently as possible.

1.6 There is a general lack of a cohesive infrastructure and capital investment planning to meet the envisaged growth in passenger (and air) traffic in partnership with airlines and the airport community.

1.7 A direct cost relation exists between airport charges and infrastructure investments that airlines fund, whether capital or operating expenditures. Airport infrastructure investments therefore need to be affordable, fit for purpose and deliver a return on the investment made.

### 2. DISCUSSION

#### **Airport Master Plan and Infrastructure Planning Process**

2.1 All airports should develop a master plan in order to guide future infrastructure and facility development programs in a logical, sustainable and cost efficient manner.

2.2 The master plan should allow for unfettered incremental expansion of all facilities until the ultimate capacity of the site is attained. No development should proceed until a master plan is in place.

2.3 Airport infrastructure development is iterative and requires a regular, ongoing dialogue with the airline community. “One-off” or irregular meetings to provide updates to the airline community on pre-determined outcomes does not constitute consultation.

2.4 IATA recommends capital investment programs to cover the short (0 – 5 years) and medium (5 – 10 years) terms and be reviewed annually.

2.5 Consultation with the airline community is required at key decision points by engaging the community in a timely manner at relevant stages of the planning process.

2.6 Please refer to IATA’s best practice Airport Master Planning guidance in Appendix A for more details.

### **Infrastructure Investment – Best Practice Consultation**

2.7 Meaningful and effective airline community consultation is essential to align airport-airline infrastructure objectives, secure airlines buy-in and maximize the benefits of infrastructure investments.

2.8 Best practice airport-airline community consultation should achieve the following objectives:

- A phased, prioritized and flexible capital investment plan agreed and endorsed by airlines, resulting in clearly defined airline benefits and affordable airport charges.
- Cost efficient infrastructure investment that is demand led, fit for purpose and delivers best value for airlines.
- Investment plans that are compatible with the airport’s Master Plan taking account of longer term developments.
- A transparent consultation process that values airline inputs, works towards consensus and results in informed decision making.
- Equitable treatment, non-discrimination and open access resulting from airline community consultation and adoption of ICAO mandated principles.

2.9 Please refer to IATA’s Airport Infrastructure Investment Best Practice Consultation guidance in Appendix B for more details.

2.10 IATA is committed to supporting airports and authorities to help facilitate the necessary infrastructure planning framework to deliver demand driven, timely, cost effective and functional aviation infrastructure. This can be achieved through:

### **Private Sector Participation in Airports**

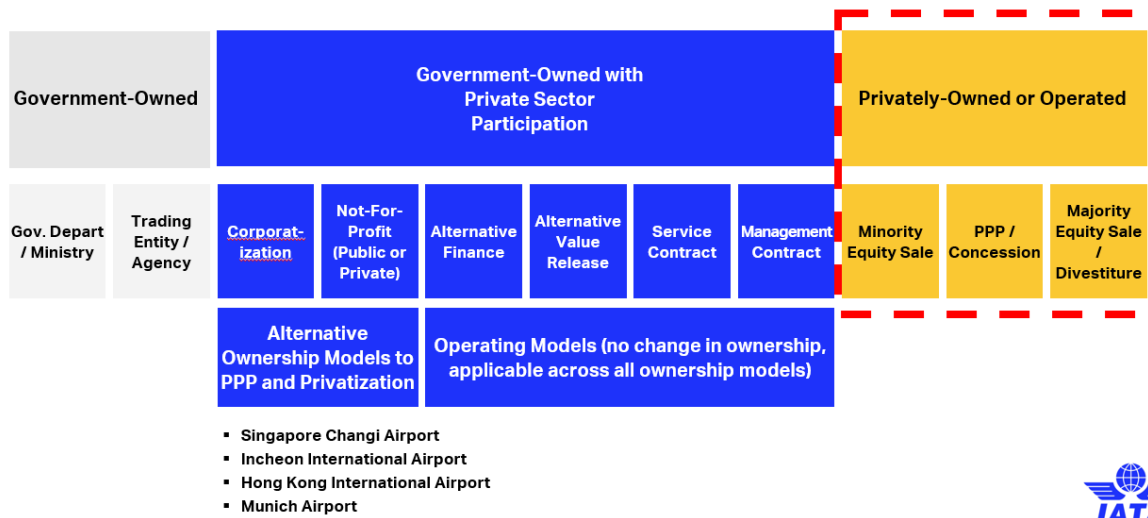
2.11 IATA is mindful that some States have cited the lack of resources to fund the capital investments needed and is considering private sector participation in funding infrastructure developments and to operate airports.

2.12 To better support decision makers in the process, IATA published the “Airport Ownership and Regulation<sup>1</sup>” guidance booklet in June 2018 and presented this at the 55<sup>th</sup> DGCA meeting last year. The booklet sets out recommendations for alternative ownership and operating models for airports globally, improved governmental decision-making, and required regulatory safeguards for privatized airports. The Ownership and Regulation report (see extract below) details how there is a broad range of ownership and operating models that can often meet government objectives for increased financing or service improvement, without the need for sale of assets and loss of strategic control of the airport.

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<sup>1</sup> <https://www.iata.org/policy/infrastructure/Documents/Airport-ownership-regulation-booklet.pdf>

# Ownership and Operation Options



2.13 If a government still does decide to pursue privatization, this can be either through a sale of an asset (equity sale) or through a concession agreement for the private sector company to build and/or operate the airport facility. IATA strongly recommends this to be defined in a business case which justifies the intended benefits for all stakeholders for a move to the private sector.

2.14 The large majority of airport privatizations are based on concessions (shown in the red box above). That is where the government retains ownership of the asset (it could just be the land for a new airport) and brings in a private operator to finance, build and or operate the airport.

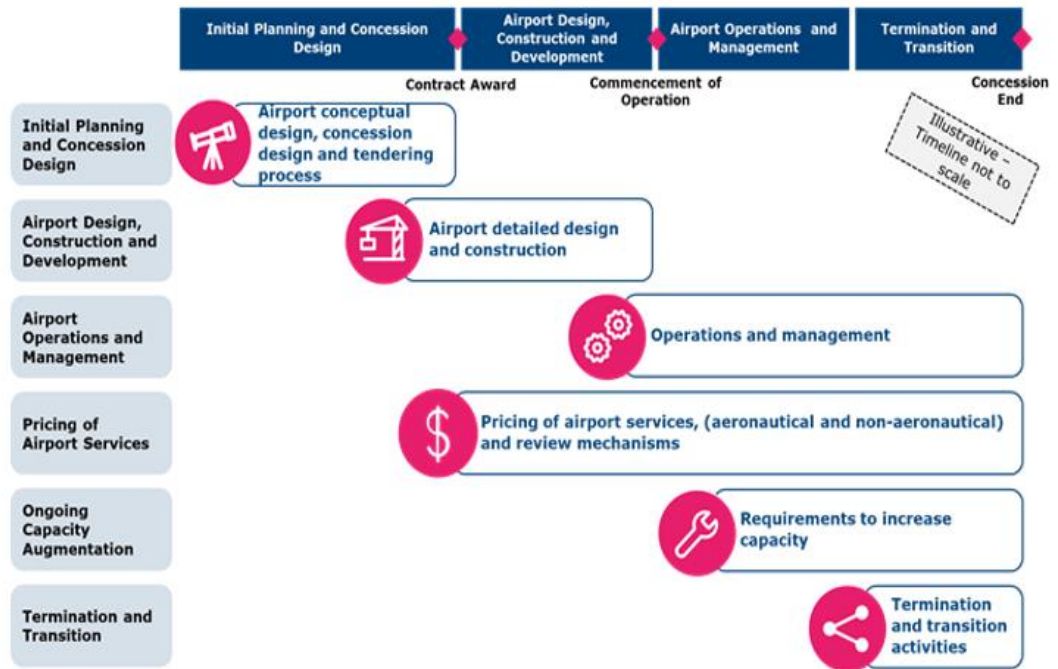
2.15 There are many models of concessions for airports which typically represent a contractual relationship negotiated between the government as the asset owner and the private sector concessionaire. To assist the decision-makers in government institutions in this process, IATA published the “Balanced Concessions for The Airport Industry<sup>2</sup>” guidance booklet in December 2018, detailing the concept and principles to structure contracts with “win-win” outcomes through aligned incentives for all stakeholders, which include customers, consumers, communities, asset owners and concessionaires.

2.16 The process of defining the Balanced Concession comes under four main principles – Collaboration, Transparency and Information Sharing, Mutual Interest and Balanced Risk and Reward Sharing. Any potential solution should be bound by principles that work for all stakeholders, including:

- Appropriate return on investment for the concessionaire over the concession period.
- Meeting the requirements of customers and consumers for new capital assets.
- Maximizing the reversionary value of the airport asset for the government.
- Payment for infrastructure over its useful life and not the concession life.

2.17 The balanced approach should be applied across the various key elements of an airport concession life cycle as depicted below:

<sup>2</sup> <https://www.iata.org/policy/infrastructure/Documents/Balanced-concession-for-the-airport-industry.pdf>



### 3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

- a) Ensure an airport master plan is developed for each airport, and reviewed periodically with participation from stakeholders;
- b) Recognize the need to address the infrastructure capacity constraint issue urgently through operational efficiencies and new infrastructure when required;
- c) If privatization is pursued, adopt the balanced concessions framework proposed by IATA;
- d) Champion collaborations through joint-up thinking with airlines and key stakeholders;

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# Master Planning

All airports should develop a master plan in order to guide future infrastructure and facility development programs in a logical, sustainable and cost-efficient manner.

## SITUATION

Many airports currently lack a master plan or vision of the future. As a consequence they run the risk that their short to medium term capacity enhancement projects are ill-judged, misconceived, inappropriately sized and poorly located, thereby restricting their ability to attain the airfield's ultimate potential.

## IATA POSITION

IATA seeks to ensure that all airport capacity enhancement programs are closely tied to an airport master plan.

The master plan should be prepared by independent consultants with global experience and a proven history of delivering plans that enable all stakeholders to expand their operations and undertake profitable business.

Airlines and their representative associations should be fully involved in the creation, development and review of the master plan. Infrastructure should be designed to be as cost-efficient as possible and facilities should not be "gold plated".

The master plan should allow for unfettered incremental expansion of all facilities until the ultimate capacity of the site is attained. No development should proceed until a master plan is in place.

## PLANNING PROCESS

- ◆ Engage all airlines in a full consultation to review the proposed discounts or incentives and agree on clear and measurable objectives related to these rebates.
- ◆ Clearly define the scope of the project and the terms of reference
- ◆ Review statistical data and forecast potential demand
- ◆ Assess existing system capacities and the site's ultimate development potential
- ◆ Undertake an analysis of the different requirements
- ◆ Make strategic choices and identify primary strategic drivers, e.g. airfield configuration, location and size of airside, landside and airport support elements
- ◆ Input airport and airline priorities

- ◆ Develop different options
- ◆ Review preferred options, undertake an environmental evaluation, and determine best option(s) for further analysis
- ◆ Outline the preferred short (0 – 5 years) to medium (5 – 10 years) term development programs, with these tied to the airport's master plan
- ◆ Estimate a 10 year capital expenditure program and input to the financial model
- ◆ Project the estimated impact on the level of airport charges and review the affordability of the 10 year program.

If, following consultation with airlines, development is determined to be unaffordable then:

- ◆ Look to minimize costs and make efficiency savings
- ◆ Break large projects into smaller, more manageable phases
- ◆ Further simplify the architectural / engineering solution

## RELATED AIRPORT CHARGES PRINCIPLES

ICAO key charges principles.

In setting user charges for the airport, charges principles as stated in ICAO's Policies for setting Airport and Air Navigation charges (Doc. 9082) should be adhered to:

- ◆ Non-discrimination – between different groups of users
- ◆ Consultation – engaging users before any changes in the level or structure of charges and giving proper consideration to users' views
- ◆ Transparency – providing users with transparent and appropriate financial, operational and planning data
- ◆ Cost-relatedness – setting charges based on the cost of providing services

# PLANNING GUIDELINES

When developing a master plan, consultants should wherever possible cater for the following:

## Airside Infrastructure

- ◆ For midfield passenger terminal development, staggered independent parallel runways with a minimum separation of 2,000<sup>1</sup> meters
- ◆ Capability to construct dual parallel taxiways in phases, as required to support increasing peak hour aircraft movement rates
- ◆ Shortest possible and most direct taxiway routes between rapid exit taxiways and aircraft parking positions
- ◆ Shortest possible and most direct taxiway routes between aircraft parking positions and holding / bypass positions at runway thresholds
- ◆ No single taxi-lane cul-de-sacs
- ◆ Aprons capable of accommodating multiple aircraft types in the ultimate stage
- ◆ Apron vehicular traffic reduced to a viable operational minimum at head of stand only

## Landside Infrastructure

- ◆ All airlines, and at large airports all alliance partners, collocated under one roof
- ◆ Support for emerging technologies that enhance and streamline the customer experience, e.g. self service check-in and bag drop, self boarding, etc.
- ◆ Low cost linear terminals, piers and satellites available to all airlines and capable of incremental expansion
- ◆ Single below apron level people mover system with minimum possible number of transfer nodes if necessary

## Support Facilities

- ◆ Primary facilities, such as aircraft maintenance and cargo terminals located on site in positions that do not restrict incremental expansion of piers, satellites and aprons
- ◆ Fuel farms, fed from two independent sources, located away from the primary operational area
- ◆ Centralized de-icing pads adjacent to primary departure runway thresholds
- ◆ Prioritizing the provision of airport supplied services such as FEGP, PCA, SEGS for both operational and environmental reasons

## Surface Access Systems

- ◆ Capability to accommodate multi-modal transport interchanges
- ◆ High-speed, regional and local rail through the site and directly under the main terminal building

## Land Use Planning

Land beyond the current airport boundary should be zoned and safeguarded to ensure:

- ◆ Airspace around aerodromes is maintained free from obstacles
- ◆ Noise sensitive developments are not permitted to encroach on key operational areas
- ◆ Ultimate development potential can be realised

# RELATED ICAO DOCUMENTATION

- Doc. 9184, Airport Planning Manual – Part 1 Master Planning
- Annex 14, Vol. 1, Aerodrome Design and Operations

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<sup>1</sup> Other configurations are possible – see ICAO Doc. 9184. The land available for airside, landside and support infrastructure should support the capacity potential of the runway(s).



# Airport Infrastructure Investment - Best Practice Consultation

## 1. INTRODUCTION

As airports are only built to serve as aviation infrastructure enabling airlines to operate, airlines are the primary customers of airports and a major source of revenue for airport authorities and operators, ancillary industries and services.

A direct cost relatedness exists between airport charges and infrastructure investments that airlines fund, whether capital or operating expenditures. Airport infrastructure investments therefore need to be affordable, fit for purpose and deliver a return on investment for airlines.

Investments should only proceed where a clear Business Case exists, supported by a positive cost benefit analysis and the explicit agreement of airlines.

Meaningful and effective airline community consultation is essential to align airport – airline infrastructure objectives, secure airlines buy-in and maximize the benefits of infrastructure investments.

The alternative will result in disparate, uncoordinated strategies and investments that are incorrectly prioritized, mistimed, and neither functional nor cost effective. Inefficient or poorly planned airport development adversely affects traffic growth and the broader economic benefits the airport delivers.

Ultimately an airport's goal should be to enable the success of airlines to ensure the economic benefits for all parties are maximized.

## 2. OBJECTIVES & BENEFITS

Best practice airport-airline community consultation should achieve the following objectives:

- A phased, prioritized and flexible capital investment plan agreed and endorsed by airlines, resulting in clearly defined airline benefits and affordable airport charges.
- Cost efficient infrastructure investment that is demand led, fit for purpose and delivers best value for airlines.
- Investment plans that are compatible with the airport's Master Plan taking account of longer-term developments.

- A transparent consultation process that values airline inputs, works towards consensus and results in informed decision making.
- Equitable treatment, non-discrimination and open access resulting from airline community consultation and adoption of ICAO mandated principles.

The benefits of best practice airline community consultation are clear:

- Business Cases that clearly demonstrate a return on investment for airlines. Project investments should only proceed that result in operating cost reductions and efficiencies with the airline community's agreement i.e. a reduction in operating cost per passenger.
- Airport development plans phased to balance capacity with demand to avoid over or under investment and supply.
- Infrastructure that meets the airlines' functional airport passenger and operational requirements.
- Improvements in passenger experience and airport service quality taking account of alternative innovative solutions and technology.
- The support and buy-in of airline customers.
- Airport investments that are independently benchmarked and demonstrate assurance and value for money to airlines.
- Resilient investment plans phased to minimize operational disruption during construction.
- Open access to facilities and services at an agreed minimum service standard and lowest possible cost.
- Infrastructure designed to be flexible and adaptable, safeguarded for modular expansion and able to accommodate changes in functionality over time.
- A quality check with airline subject experts that investments deliver the intended outcomes taking account of industry best practices.

### 3.SCOPE OF INVESTMENTS

The scope of infrastructure consultation is broad ranging and should include the following elements:

- Airport Master planning.
- Airside infrastructure i.e. runways, taxiways, aprons, stands and gates.
- Passenger terminal i.e. departure forecourt, check-in or baggage drop hall, passenger security, emigration and immigration, airside departures lounge, retail concessions, piers, stands, gates, jet bridges, arrivals hall, baggage handling systems, wayfinding.
- Surface access within the airport boundary i.e. roads, car parks, rail, sea.
- Cargo terminal developments.
- Airport support elements.
- Asset replacement.

### 4.Best Practice Consultation & Governance

User consultation is essential from an early stage in the infrastructure development process before irreversible decisions are made:

- Identify the common airlines-airport business drivers that form the basis of the investment plan.
- Agree an affordable capex threshold for investments considering airport user charges.
- Establish an airport-airlines consultation Governance structure that ensures timely and well-informed decisions with airline inputs.
- Capture airline functional requirements and agree planning inputs and assumptions.
- Analyze the positive and negative effects on Airports operating expenses.

A jointly agreed airport-airline community Governance structure is required that ensures a structured and planned approach to consultation. This should also include:

- Meaningful discussions between subject matter experts experienced in airport infrastructure planning, airport charges and commercial areas, who are empowered to take decisions.
- Clear objectives, decision making and alignment between steering groups and working groups.
- Terms of Reference (ToR) for each working group including objectives, scope, accountabilities, frequency, attendees, and dependencies with other work streams.
- Sufficient time for consultation dialogue typically between 6-12 months before business plans approvals.

- Meeting schedules agreed in advance to ensure airline subject experts are able to attend and a structured approach is implemented.

A Consultation "protocol" or "charter" setting out the behaviors required for effective consultation:

- Work towards airport-airline community consensus decision making.
- Transparency is a critical aspect of any commercial agreement between airport providers and airline customers.
- Commitment from airport and airlines to provide the necessary resources to participate in a regular, structured dialogue.
- A "Constructive Engagement" based on mutual respect, collaboration, openness and trust between business partners.

### 5. Infrastructure Planning Process

Airport infrastructure development is iterative and requires a regular, ongoing dialogue with the airline community. "One-off" or irregular meetings updating the airline community on pre-determined outcomes does not constitute consultation.

IATA recommends capital investment programs should cover the short (0 – 5 years) to medium (5 – 10 years) terms and be reviewed annually.

Consultation with the airline community is required at key decision points by engaging the airline community in a timely manner at the relevant stages of the planning process.

Consideration should be given to identify break points in programmes and projects should demand not materialise as anticipated.

#### 5. 1 Program Level Consultation

Programme management is recommended to provide an overview of project investment activities and to align airport and airline objectives in order to:

- Prioritize projects depending on airlines willingness to fund investments considering airport charges.
- Provide an overview of constructability and project phasing to minimise operational disruption.
- Identify key milestones supporting informed airport-airline community decisions.
- Ensure projects align to business plan objectives.
- Address major changes or resolve any escalated issues.
- Monitor and track the performance of multiple projects to support successful delivery.
- Manage project risks across multiple projects.

Programme and project assurance is important to assess the reasonableness of all key decisions made on selected projects. Independent third-party checks to assess at key stages in the development process is recommended.

Project Business Cases should be developed in parallel with the key design and development stages to analyse costs, benefits and ensure the intended project outcomes are on track.

Setting criteria to determine which projects are targeted for airline community consultation is recommended:

- Capital threshold above a certain monetary value threshold.
- Project scope and/or complexity.
- Project timeframes.
- Airlines impact.
- Strategic impact.

## 5.2 Project Level Consultation

Best practice requires airports to consult with the airline community at key stages common to most projects. Noting different project processes and terminologies exist this typically includes:

- Initiate/Concept stage – agree investment objectives and identify project options.
- Options Selection stage– identifies design solutions and how project benefits will be delivered.
- Estimated 50% cost and design certainty.
- Scheme Design stage – development: of the preferred option:
  - Estimated 85% cost and design certainty.
  - Fixing project costs and programme is recommended.
- Implementation and Delivery phase – construction and engineering works focusing on implementation and delivering the agreed benefits and outcomes:
  - Operational Readiness and Airport Transfer (ORAT) is a critical project element to involve Users in.

“Gateway” events for each of the key project stages consulted upon with airlines are required as a prerequisite to progressing to the next stage of feasibility:

- A review of technical solutions and the Business Case.
- Airline queries or issues should be fully resolved before moving to the next stage.
- A formal sign-off based on airline community consensus.

## 5.3 Business Case Consultation

The purpose of a project Business Case is to clearly set-out all relevant information as to why the project is required, what benefits will be achieved for airlines typically funding

the investments, and alternatives available to airlines. A detailed cost-benefit analysis is required to clearly demonstrate the monetary return on investment for airline stakeholders.

Typical elements of the Business Case are:

- Project justification or need i.e. capacity development projects should be clearly linked to passenger growth or defined Levels of Service outcomes agreed with the airline community.
- Link to strategic objectives and the master plan.
- Expected benefits and outcomes.
- Capital costs associated with constructing the infrastructure.
- Operating costs for airlines and airports. Capital investments should result in efficiencies and lower operating costs.
- Depreciation – the rate at which assets reduce in value and its cost is re-allocated over its useful life in-line with industry norms.
- Project dependencies.
- The impact on aeronautical and non-aeronautical charges.
- Assurance that existing assets are being used as efficiently as possible.

## 5.4 Efficient Airport Investments

Capital investments should aim to deliver cost efficient outcomes by optimizing a project’s scope, specifications, time, costs and risks supported by a well-managed, structured development process.

Investments should take into account what is being constructed, how it is being constructed, and when facilities are required, in addition to capital cost benchmarks.

The airline community should be closely involved in agreeing the optimum balance between elements that have a material impact on costs and the efficiency of the solution:

- Scope – ensure the functional requirements of airlines are captured and Business Case benefits are delivered.
- Specifications – airlines require functional airport facilities that deliver their required levels of service at the lowest possible cost. Over-specifying terminal finishes is to be avoided.
- Timeframes – efficient project delivery focused on the beneficial use of assets for airlines, taking account of construction phasing to minimize airline and operational disruption.
- Procurement and contracting strategy – selecting the appropriate tendering and contracting strategy to maximize the efficiency of projects and purchasing power of airports.
- Capital costs – benchmarking and independent checks by a third party to ensure estimates are in-line with the market.
- A rebate mechanism should be introduced if assets are not delivered to the defined timeframes, at lower than the estimated costs, or when projects are delayed.

## 6. Common Issues

Airline and airport subject expert feedback highlight some issues to be aware of:

- Avoid done deals and “lip-service” consultation.
- Recognize airlines affordability and airport charges as a fundamental criterion.
- Avoid over specifying and “gold-plating” investments – consult with Users.
- Operational disruption – plan to minimize disruption during the construction phase.
- Project priorities – balance operational requirements with airport commercial revenues.
- Alternate options to optimize the use of existing infrastructure and “do-nothing” scenarios.

## 7. Supporting Documents

This paper provides a framework for other papers and related to airport infrastructure development:

- IATA Airport Consultative Committee (ACC) - Terms of Reference.
- IATA Airport Service Level Agreements (SLA) – Best Practice.
- IATA Levels of Service (LoS) – Best Practice.
- Additional relevant papers and guidance materials:
- ICAO Doc. 9082 – 9th Edition, paragraph 21.
- EC Airport Charges Directive 2009/12/EC.
- IATA Airport Charges - Transparency paper.
- IATA Airline Engagement in Consultations paper
- IATA Airport Development Reference Manual (ADRM).

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**LIST OF ACTION ITEMS ARISING FROM THE 56<sup>th</sup> DGCA CONFERENCE**

Discussion Paper No.	Action Item	Description
<b>Agenda Item 1 - Theme Topic “Harmonizing efforts to meet the capacity constraints”</b>		
<b>DP/1a/1</b> <b>DP/1a/8</b> <b>DP/8/3</b>	Action Item 56/1	The Conference: <ul style="list-style-type: none"> <li>a) while recognizing the benefits delivered by CAT missions in furtherance of ICAO’s NCLB initiative, urged ICAO to conduct CAT missions and other similar assistance programmes on a regular basis; and</li> <li>b) urged States and Administrations to:               <ul style="list-style-type: none"> <li>i. develop and further strengthen regional and sub-regional cooperation in order to promote the highest degree of aviation safety and security;</li> <li>ii. consider to provide volunteer technical experts to ICAO’s APAC CAT Mission programme and ICAO’s IPAV programme; and</li> <li>iii. collaborate through providing financial contributions and in-kind technical assistance to neighboring States/Administrations including membership of sub-regional cooperative arrangements to meet capacity constraints of the region.</li> </ul> </li> </ul>
<b>DP/1a/2</b>	Action Item 56/2	The Conference urged States/Administrations to collaborate with industry partners in the implementation of ATM projects and harmonize efforts in the ANS focus areas of the Beijing Declaration.
<b>DP/1a/3</b>	Action Item 56/3	The Conference urged States/Administrations to: <ul style="list-style-type: none"> <li>a) promote use of latest advanced technologies and enhance security infrastructure at airports;</li> <li>b) improve their training capabilities and consider training opportunities provided by other States, especially India; and</li> <li>c) ensure that a business case analysis is undertaken for new technologies and due emphasis is given to training and planning.</li> </ul>
<b>DP/1a/4</b>	Action Item 56/4	The Conference urged States/Administrations to explore the feasibility of improving and promoting targeted and precise oversight and benefit from experiences of China and other States which are willing to share their experiences.

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<b>Discussion Paper No.</b>	<b>Action Item</b>	<b>Description</b>
<b>DP/1a/9 DP/12a/2</b>	Action Item 56/5	The Conference urged States/Administrations to: <ul style="list-style-type: none"> <li>a) <b>accelerate progress under the Beijing Declaration</b>, provide customized assistance to the Pacific Island States, and work with ICAO on its technical assistance programme and capacity building activities for the region;</li> <li>b) work cooperatively to ensure that the Asia-Pacific's representation on the Council is not diminished;</li> <li>c) support the ratification of the amendments to Articles 50 (a) and 56 of the Chicago Convention to enlarge the Council and ANC; and</li> <li>d) make use of the 2019 ICAO Treaty Event to be held on 24-25 September 2019 in the margins of the 40th Assembly Session, to deposit instruments of ratification or accession to these or any other treaty for which ICAO acts as Depository.</li> </ul>
<b>DP/1a/10</b>	Action Item 56/6	The Conference urged: <ul style="list-style-type: none"> <li>a) APANPIRG to support the implementation of the sixth edition of the GANP;</li> <li>b) States to support the GANP by the development and maintenance of a national air navigation plan and its supporting documents to align with the GANP and regional air navigation plan; and</li> <li>c) APANPIRG and the ICAO Asia and Pacific Office &amp; Regional Sub Office to facilitate and coordinate such activities to ensure regional harmonization and alignment to the GANP.</li> </ul>
<b>Agenda Item 3 - Aviation Safety</b>		
<b>DP/3/1</b>	Action Item 56/7	The Conference: <ul style="list-style-type: none"> <li>a) agreed on the importance of prioritizing the implementation of the GEUSR and AN-Conf/13 recommendations, being mindful of the implications for small states with significantly less resources, especially the States covered by the current Pacific Small Islands Developing States Study conducted by ICAO;</li> <li>b) agreed the enhancement of the USOAP-CMA process should provide a more proportionate and risk-based system; and</li> <li>c) noted the need for States and international organizations to provide support to ICAO to undertake this work in a timely manner.</li> </ul>

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<b>Discussion Paper No.</b>	<b>Action Item</b>	<b>Description</b>
<b>DP/3/2</b>	Action Item 56/8	The Conference urged States/Administrations to support the GASOS approach in principle and acknowledge that further work needs to be undertaken to determine the costs and benefits as well as legal implications of GASOS for regions, States and the aviation industry, and what priority should be given by ICAO to potential GASOS implementation.
<b>DP/3/3</b>	Action Item 56/9	The Conference: <ul style="list-style-type: none"> <li>a) encouraged States/Administrations to share best practices in equipping their safety inspectors for more effective safety management;</li> <li>b) requested ICAO and States/Administrations to develop more tools and guidance materials to build the new competencies of its safety inspectors and incorporate them in the training programmes and guidance material; and</li> <li>c) requested ICAO to incorporate these new competencies in training programmes and guidance materials.</li> </ul>
<b>DP/3/4</b>	Action Item 56/10	The Conference urged States/Administrations to: <ul style="list-style-type: none"> <li>a) harness and optimise resources to develop safety data collection and analytic capabilities for the fulfilment of regional and global aviation safety priorities and objectives in relation to the GASP in collaboration with industry partners; and</li> <li>b) collaborate with industry partners on exchange of best practices in safety information sharing and analysis, and share methodologies for safety risk identification, analysis and mitigation to allow ease of safety information exchange and synergy in alignment and benchmarking of safety studies among different programmes.</li> </ul>
<b>DP/3/12 DP/3/18</b>	Action Item 56/11	The Conference urged ICAO to examine the potential benefits, balanced against the associated costs of the development of provisions and guidance material for certification of air navigation services providers as a priority.
<b>DP/3/24</b>	Action Item 56/12	The Conference urged States/Administrations to note the various challenges posed by the commercial drone operations, consider learning from the experiences of States with more mature regulatory frameworks as well as engagement with ICAO and JARUS, and explore the utility of the SORA tool to facilitate regulatory development in UAS.
<b>DP/3/27</b>	Action Item 56/13	The Conference urged States/Administrations to request the Regional Aviation Safety Group – Asia Pacific Region (RASG-APAC) and supporting regional bodies to develop additional guidance on safety performance management for effective implementation of the SARPs.

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Discussion Paper No.	Action Item	Description
<b>Agenda Item 4 - Air Navigation</b>		
<b>DP/4/1</b>	Action Item 56/14	<p>The Conference urged States/Administrations to:</p> <ul style="list-style-type: none"> <li>a) sensitise their relevant government entities to the regionally-agreed policies on civil-military cooperation in regard to ballistic launch and space re-entry activity, the inappropriate promulgation of airspace in another State's FIR and restrictive practices in international airspace unsupported by international Conventions;</li> <li>b) ensure proper compliance with and participation in established ATM contingency operations, taking into consideration the lessons learnt from the Pakistan airspace contingency, especially with regard to compliance with Conventions in international airspace and the State's obligations to facilitate traffic in such airspace, compliance with agreed plans, and the economic and environmental costs of not doing so;</li> <li>c) accelerate efforts to provide ICAO with the input considered necessary to validate the description of FIRs in the RANP; and</li> <li>d) engage in the Regional discussion and effort to accelerate progress of the Asia/Pacific Region to implement the Seamless ATM (ANS) Plan, including an emphasis on whole-of government planning using NANPs (which had been endorsed by the Ministers of Civil Aviation in the Beijing Declaration).</li> </ul>
<b>DP/4/2</b>	Action Item 56/15	The Conference noted the implementation progress of ADS-B implementation in India and encouraged States / Administrations to share ADS-B data with neighboring States to take full benefits of ADS-B.
<b>DP/4/3</b>	Action Item 56/16	<p>The Conference:</p> <ul style="list-style-type: none"> <li>a) recognized the benefits of ANS performance measurement and the challenges in its implementation and noted that support to ICAO is necessary to develop a KPI framework guidance document for Air Navigation Services Providers (ANSPs); and</li> <li>b) encouraged Asia and Pacific States, APANPIRG and the aviation industry to use the 6<sup>th</sup> edition of the GANP together with the future guidance document in the implementation of performance management.</li> </ul>
<b>DP/4/22</b>	Action Item 56/17	The Conference noted that the Pacific Islands Forum established policies on the management of Pacific Upper Airspace and requested the concerned States to follow the norms established by ICAO in this regard.

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<b>Discussion Paper No.</b>	<b>Action Item</b>	<b>Description</b>
<b>Agenda Item 5 - Aviation Security and Facilitation</b>		
<b>DP/5/1</b>	Action Item 56/18	The Conference urged States / Administrations to: <ul style="list-style-type: none"> <li>a) implement all the Annex 9 Standards related to the ICAO TRIP Strategy;</li> <li>b) establish a National Air Transport Facilitation Programme (NATFP) and associated Committees in accordance with the relevant Annex 9 Standards;</li> <li>c) commit to invest in instituting robust civil registration systems to support issuance of reliable eMRTD; and</li> <li>d) endeavour to join the ICAO PKD as a means to authenticate travel documents in order to facilitate passengers clearance and neutralize the activities of cross-border criminality.</li> </ul>
<b>DP/5/4</b> <b>DP/5/7</b> <b>DP/5/14</b>	Action Item 56/19	The Conference: <ul style="list-style-type: none"> <li>a) encouraged States/Administrations to implement automated facilities for passenger processing, in reference to ICAO Annex 9 Recommended Practice 6.8 and Annex 17, as a means to increase efficiency of passenger facilitation at their airports; and</li> <li>b) encouraged States/Administrations to adopt ground operational efficiency standards, where necessary and practicable, noting the pace and extent of such adoption should take into account each State's socio-economic and political environment, as well as each airport's unique operating context.</li> </ul>
<b>DP/5/2</b> <b>DP/5/5</b> <b>DP/5/12</b>	Action Item 56/20	The Conference urged States/Administrations to: <ul style="list-style-type: none"> <li>a) provide expertise and guidance to the ICAO on performance metrics to determine the effectiveness of capacity building activities in a timely manner;</li> <li>b) provide information to ICAO to support the task of mapping capacity-building resources, providers and activities;</li> <li>c) support ICAO in the development and delivery of aviation security training to the extent possible in line with the Global Aviation Security Training Policy endorsed by the 30<sup>th</sup> AVSEC Panel;</li> <li>d) actively respond to ICAO GAsEP, continuously improve aviation security technology resources, promote technological innovation, and conduct exchanges and cooperation on best practices; and</li> <li>e) encourage Directors-General of Civil Aviation (DGCA) to attend the 3<sup>rd</sup> run of the DGCAs Programme on AVSEC on 21 – 22 Sep 2019 in Montreal, Canada.</li> </ul>

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<b>Discussion Paper No.</b>	<b>Action Item</b>	<b>Description</b>
<b>DP/5/6 DP/5/8</b>	Action Item 56/21	<p>The Conference, noting the significance of cyber security, urged the States/Administrations to:</p> <ul style="list-style-type: none"> <li>a) promote the development of a cyber security culture across the aviation sector following the same model as safety and security culture including building dialogue, robust consultation, consensus, transparency and trust and effective communication and collaboration between all parties;</li> <li>b) encourage States and Industry to develop programmes to build an aviation cyber security workforce that can respond to the challenge both now and into the future as well as educate the current aviation workforce on cyber security challenges; and</li> <li>c) request ICAO to focus on the development of principle-based guidance on aviation sector cyber-security to assist States with integrating aviation into national frameworks, and to provide guidance on the purpose and application of the trust framework.</li> </ul>
<b>Agenda Item 6 - Economic Development of Air Transport</b>		
<b>DP/6/1</b>	Action Item 56/22	<p>The Conference urged States/Administrations to:</p> <ul style="list-style-type: none"> <li>a) support ICAO's work for Economic Development of Air Transport;</li> <li>b) apply and follow ICAO's policies and guidance in the air transport field in their regulatory practices;</li> <li>c) provide statistics required by ICAO in a timely manner;</li> <li>d) use ICAO data, tools and analysis; and</li> <li>e) actively participate in the ICAO upcoming meetings.</li> </ul>
<b>DP/6/2</b>	Action Item 56/23	<p>The Conference urged States/Administrations to:</p> <ul style="list-style-type: none"> <li>a) reaffirm the importance and relevance of ICAO's Policies on Taxation in the Field of International Air Transport (Doc 8632) as the only industry-agreed standard for air transport taxation;</li> <li>b) recognize the fundamental difference between user charges and taxes and urge national authorities to clearly distinguish the two concepts;</li> <li>c) acknowledge significant social and economic benefits associated with air transport and risks associated with reduced benefits due to poorly designed and/or excessive taxation;</li> <li>d) acknowledge the importance of a Cost Benefit Analysis to taxation as a recommended decision-making tool in designing air transport-related taxes; and</li> </ul>

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Discussion Paper No.	Action Item	Description
		<p>e) cooperate closely with IATA and ACI and other industry groups under the coordination of ICAO, on issues related to air transport taxation and engage more in the dialogue with Treasury Departments/Ministries of Finance and taxation authorities.</p>
<b>DP/6/3</b>	Action Item 56/24	<p>The Conference encouraged States/Administrations to:</p> <p>a) ensure an airport master plan is developed for each airport, and reviewed periodically with participation from stakeholders in line with various guidance issued by ICAO from time to time;</p> <p>b) recognize the need to address the infrastructure capacity constraint issue urgently through operational efficiencies and new infrastructure when required;</p> <p>c) if privatization is pursued, consider the balanced concessions framework proposed by IATA and follow the guidance issued by ICAO in this regard; and</p> <p>e) collaborate with airlines and key stakeholders.</p>
<b>DP/6/4</b>	Action Item 56/25	<p>The Conference urged the States/Administrations to:</p> <p>a) recognise the benefits from ambitious multilateral air transport agreements that go beyond market access, including collaboration in capacity-building, aviation safety and doing business issues;</p> <p>b) request ICAO to continue the work relating to promoting the benefits from market liberalisation and potential building blocks and identifying barriers;</p> <p>c) to examine successful multilateral air transport agreements such as ASEAN Open Skies Agreements and Europe Common Aviation Area agreements to understand key lessons to develop processes and guidelines in achieving multi-lateral liberalisation; and</p> <p>d) to consider smaller scale multi-party liberalisation approach as a stepping stone to achieving a global international multilateral agreement on market access liberalisation aligned with ICAO's long-term vision on market liberalisation.</p>

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<b>Discussion Paper No.</b>	<b>Action Item</b>	<b>Description</b>
<b>Agenda Item 7 - Aviation and Environment</b>		
<b>DP/7/1</b>	Action Item 56/26	<p>The Conference:</p> <ul style="list-style-type: none"> <li>a) encouraged those States that have not yet developed or updated their States' Action Plans with quantified data to do so as soon as possible;</li> <li>b) invited States to voluntarily participate in the pilot phase of the CORSIA from 2021;</li> <li>c) urged States with their aeroplane operators to progress necessary actions in MRV in 2019 and 2020 for the implementation of CORSIA; and</li> <li>d) invited States to implement CORSIA in a harmonized manner with every State making its contribution to the best of its ability.</li> </ul>
<b>DP/7/2</b> <b>DP/7/8</b>	Action Item 56/27	<p>The Conference:</p> <ul style="list-style-type: none"> <li>a) reaffirms ICAO's continuous leadership on environment issues relating to international aviation emissions, and the Assembly's decision to implement a global market-based measure scheme in the form of CORSIA, determining it to be the market-based measure applying to CO<sub>2</sub> emissions from international aviation;</li> <li>b) invited States to include environmental protection in their planning and implementation activities related to the improvement of the civil aviation system;</li> <li>c) encouraged States to participate in the ICAO ACT-CORSIA capacity building activities, including the CORSIA buddy partnerships, and request ICAO to align the technical assistance provided to States for a consistent CORSIA implementation;</li> <li>d) encouraged States to participate in the stocktaking and consider their involvement in the preparation of feasibility studies to evaluate the potential for the future development and deployment of SAF;</li> <li>e) requested ICAO to work with interested States and the International Accreditation Forum (IAF) to meet the demand for accredited verification bodies to support the CORSIA implementation including through the provision of CORSIA Verification courses; and</li> <li>f) recognized the importance of timely ICAO guidance on CORSIA eligible emissions units and CORSIA eligible fuels for emissions offsetting in CORSIA.</li> </ul>
<b>DP/7/9</b>	Action Item 56/28	The Conference encouraged States/Administrations interested in including supplemental benefits within their State Action Plans to note that they can consider using the ACERT.

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Discussion Paper No.	Action Item	Description
<b>Agenda Item 8 - Technical and Regional Cooperation</b>		
<b>DP/8/1</b>	Action Item 56/29	<p>While noting the progress made to complete the Pacific Small Islands Developing States Aviation Needs Analysis (PSIDS Study) by September 2019, the Conference:</p> <ul style="list-style-type: none"> <li>a) requested ICAO to provide an update to APAC DGCA/57 regarding the follow up on the study and eventual implementation of its recommendations; and</li> <li>b) without prejudicing the outcome of the Study, requested ICAO to consider apportioning sufficient funds to implement the recommendations and solutions from the PSIDS Study in the next triennium.</li> </ul>
<b>DP/8/2</b>	Action Item 56/30	The Conference, while recognising the need to adopt learner-centered pedagogies to enhance competency training to equip NGAP to meet the aviation needs of the future, requested ICAO to develop guidelines to select technological training tools that supports competency based training, using learner-centered pedagogies, under the ICAO TRAINAIR PLUS Programme.
<b>DP/8/11</b>	Action Item 56/31	The Conference encouraged States/Administrations to consider including APEX in Safety in their National Aviation Safety Plan as a tool to improve compliance for Safety Enhancement Initiative-2 (SEI-2) in the 2020 – 2022 edition of GASP.
<b>DP/8/14</b>	Action Item 56/32	<p>The Conference urged States/Administrations to:</p> <ul style="list-style-type: none"> <li>a) note the wide range of projects and trainings managed and implemented worldwide and in the APAC Region by the ICAO Technical Cooperation Bureau and the Global Aviation Training Office;</li> <li>b) work with ICAO TCB as a partner for implementation of their civil aviation projects as well as encourage other aviation stakeholders in this regard;</li> <li>c) encourage additional training organizations in the APAC Region to join TrainAir Plus Programme to benefit from its numerous training solutions and competency development activities; and</li> <li>d) utilize courses listed in the ICAO Course Catalogue.</li> </ul>

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Discussion Paper No.	Action Item	Description
<b>Agenda Item 9a - Beijing Declaration – Follow up and way forward</b>		
	Action Item 56/33	<p>Recognizing the Ministers’ commitment to Human Resource Development effectively through the Beijing Declaration, the Conference urged:</p> <p>a) States/Administrations to:</p> <ol style="list-style-type: none"> <li>i. develop a remuneration level for inspectors, Scheme of Recruitments;</li> <li>ii. introduce Inspector Training System (ITS), Online training and Refresher Training;</li> <li>iii. redesign safety oversight functions (performance based and risk based); and</li> <li>iv. introduce innovative programmes to attract NGAP; and</li> </ol> <p>b) ICAO to develop guidance materials to this effect.</p>
	Action Item 56/34	<p>Recognizing the Ministers’ commitment to implement the Beijing Declaration, and noting the progress in implementing these commitments in the APAC Region, the Conference:</p> <p>a) encouraged the States/Administrations to:</p> <ol style="list-style-type: none"> <li>i. continue their efforts to achieve the Beijing Declaration target dates;</li> <li>ii. apply political will to aviation safety regulation and oversight by linking to national priorities and plans supported by economic benefits;</li> <li>iii. develop policies and a National Aviation Safety Plan (NASP), including the implementation of a State Safety Programme (SSP), developed with and endorsed by high-level in Government;</li> <li>iv. establish an appropriately organized, funded and empowered civil aviation system, structured to effectively fulfil the tasks that it is expected to undertake;</li> <li>v. have specific action plans and perform continuous self-monitoring, using USOAP tools and supported by ICAO APAC Regional Office, COSCAPs and PASO;</li> <li>vi. use regional and sub-regional collaboration mechanisms and bilateral partnerships for sharing resources and the assistance required with implementation;</li> <li>vii. enhance States’ collaboration, share lessons learned and successes;</li> </ol>

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Discussion Paper No.	Action Item	Description
		<ul style="list-style-type: none"> <li>viii. ensure that correct and up-to-date statistics are reported timely to the Regional Office in the preparation for the next Ministerial Conference in 2020; and</li> <li>ix. pay close attention to the outcomes of the 40th Assembly and its impact on the Aviation Safety and Air Navigation Services; and</li> <li>b) requested ICAO to:               <ul style="list-style-type: none"> <li>i. conduct more regular validations under USOAP;</li> <li>ii. conduct Combined Action Team (CAT) missions specific to SSP; and</li> <li>iii. revise the Beijing Ministerial Declaration Section 3 on AIG at the next opportunity based on the current applicable ICAO provisions and guidance to establish a permanent independent investigation authority in addition to regional/sub-regional accident investigation authority wherever possible, and with the addition of a target timeframe for implementation.</li> </ul> </li> </ul>
<b>Agenda Item 12a — Other Business</b>		
<b>a) Any Other Matters</b>		
DP/12a/1	Action Item 56/35	<p>The Conference urged:</p> <ul style="list-style-type: none"> <li>a) States/Administrations to:               <ul style="list-style-type: none"> <li>i. note the results from the survey, especially the challenges in effective implementation in all five key areas and the gaps in the existing support, as well as the diversity of needs across the region and that such, assistance and support would have to continue to be more targeted and customised;</li> <li>ii. note the governance approach outlined in this report, including use of the Terms of Reference (ToR) template by APAC regional groups to review existing and new ToR, while taking in to account any A-40 Resolutions in this regard and the RCM TF would report the outcomes of these reviews to the DGCA Conference in 2020;</li> <li>iii. endorse the list of initiatives suggested to streamline the communication channels and to consider adopting templates for reports and records of outcomes for regional groups, and best practices for the management of State Letters as well as request ICAO to implement the suggested initiatives; and</li> </ul> </li> </ul>

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<b>Discussion Paper No.</b>	<b>Action Item</b>	<b>Description</b>
		iv. consider the identified support mechanisms for technical assistance and the enhanced roles of other International Organizations and industry partners to complement ICAO APAC RO efforts; and  b) ICAO APAC RO to enhance support for technical assistance.
<b>DP/12b/1</b>	Action Item 56/36	The Conference adopted “Promoting ICAO Gender Equality Programme in conjunction with Next Generation of Aviation Professionals (NGAP) initiative” as the Theme Topic for the 57th DGCA Conference of the Asia and Pacific Regions to be held from 22 – 26 November 2020, hosted by Bangladesh and accordingly give emphasis to the theme topic in formulating discussion and information papers.

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