

**54th Conference of Directors General of Civil Aviation
Asia and Pacific Regions**

FINAL REPORT

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PROGRAMME

Registration Day (6th August 2017, Sunday)

14:00 – 18:00	Registration of Conference Delegates Venue: Shangri-La Hotel
17:00 – 18:00	Briefing of Moderators Venue: Shangri-La Hotel
18:00	Welcome Reception Venue: Shangri-La Hotel

DAY 1 (7th August 2017, Monday)

08:00 – 08:50	Late Registration of Conference Delegates
09:00 – 10:10	Opening Ceremony <ul style="list-style-type: none">▪ Traditional music performance▪ Welcome address by DGCA Mongolia▪ Opening address by ICAO Secretary General▪ Key Note Address by President of the Council, ICAO▪ Message by the Prime Minister of Mongolia▪ Address by Minister of Road and Transport Development of Mongolia
10:10 – 11:10	Group Photograph Session
11:10 – 11:30	Coffee Break
11:30 – 12:15	DGCA Conference - Administrative Arrangements <ul style="list-style-type: none">▪ Opening of the session▪ Election of Chair and Vice Chair▪ Introduction of Participants▪ Conference arrangements and adoption of Agenda for the Conference▪ Appointment of Moderators
12:15 – 13:00	DGCA Conference Session: <u>Agenda Item 1:</u> Theme Topic — “The Challenge of Managing Outcome Focused and Risk Based Regulations for Asia Pacific States” Moderator: Mr. Kevin Shum, DGCA, CAA Singapore

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Agenda Item 2: Review of Action Items arising from the previous Conference

13:00 – 14:00 Lunch

14:00 – 15:30 DGCA Conference Session:

Agenda Item 3: Aviation Safety and Air Navigation

Moderator: Mr. LI Tin-chui, Simon, DGCA, CAD, Hong Kong China

15:30 – 16:00 Coffee Break

16:00 – 17:00 DGCA Conference Session:

Agenda Item 3: Aviation Safety and Air Navigation (contd.)

18:30 Welcome Dinner hosted by Minister of Road and Transport Development of Mongolia
Venue: Sky Resort

DAY 2 (8th August 2017, Tuesday)

09:00 – 10:30 DGCA Conference Session:

Panel Discussion:

Topic:

Asia Pacific at the cross roads: Breaking Barriers and Navigating the Future

Panelists:

- Dr. Olumuyiwa Benard Aliu, President of the ICAO Council
- Mr. Michael P. Huerta, Administrator of Federal Aviation Administration
- Mr. Bambang Susantono, Vice President (Knowledge Management and Sustainable Development), Asian Development Bank
- Ms. Angela Gittens, Director General, Airports Council International (ACI) World
- Ms. Aireen Omar, CEO Air Asia

Moderator: Dr. Fang Liu, ICAO Secretary General

10:30 – 11:00 Coffee Break

11:00 – 12:30 DGCA Conference Session

Ulaanbaatar, Mongolia : 7 to 11 August 2017

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Agenda Item 3: Aviation Safety and Air Navigation (contd.)

Agenda Item 4: Economic Development of Air Transport

Moderator: Mr. Ibrahim Faizal, Chairman, CAA Maldives

12:30 – 14:00 Lunch

14:00 – 15:30 DGCA Conference Session:

Agenda Item 5: Aviation and Environment

Moderator: Dr. Chula Sukmanop, DG, CAA Thailand

Agenda Item 6: Technical and Regional Cooperation

Moderator: AVM. Ehsanul Gani Choudhury, Chairman,
CAA Bangladesh

15.30 – 16.00 Coffee Break

16.00 – 17.00 DGCA Conference Session

- Key outcomes of APANPIRG/27 (by APANPIRG Chairperson)
- Key outcomes of RASG-APAC/7 (by RASG-APAC Chairperson)
- Key outcomes of RASCF/5 (by RASCF Chairperson)

17.00 Free time

DAY 3 (9th August 2017, Wednesday)

9:00 – 10:30 DGCA Conference Session

- Special Session: PBN for Executives (by ICAO RSO)
- Sharing of lessons learnt by Thailand

10:30 – 11:00 Coffee Break

11:00 Trip to “Chinggisiin Khuree” Complex
[Departure from venue of the Conference]

18:00 Return to Ulaanbaatar

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DAY 4 (10th August 2017, Thursday)

09:00 – 10:30

Plenary Session

Moderator: Dato' Sri Azharuddin Abdul Rahman, DG, DCA Malaysia

Agenda Item 7.1: Session on Air Navigation (AN) Safety and Efficiency issues

Issue No. 1: Civil/Military Cooperation: a key enabler for both civil and military entities in the development of a safe and efficient air transport system that effectively serves the nation

- Presentation of the issue by the Secretariat
- Sharing of lessons learnt by India

Agenda Item 7.2: Session on Aviation Safety issue

Issue No. 2: Runway Safety – Meeting the Challenges of Increasing Runway Excursions

- Presentation of the issue by International Air Transport Association/Flight Safety Foundation
- Sharing of lessons learnt by Singapore

Agenda Item 7.3: Session on Aviation Security & Facilitation (AS&FL) issues

Issue No. 3: Resolution of Aviation Security Deficiencies

- Presentation of the issue by the Secretariat
- Sharing of lessons learnt by Republic of Korea

Breakout Session - Briefing

10:30 – 11:00

Coffee Break

11:00 – 15:00

Breakout Sessions for DGCAs + 1 nominated Subject Matter Expert (SME)

Time	New York Room (1 st Floor)	Paris Room (1 st Floor)	Tokyo Room (G1 Floor)
	(DGCA Group A)	(DGCA Group B)	(DGCA Group C)
11:00 – 12:00	Issue No. 01 (Civil/Military)	Issue No. 02 (Runway Safety)	Issue No. 03 (Aviation Security)
12:00 – 13:00	Issue No. 02 (Runway Safety)	Issue No. 03 (Aviation Security)	Issue No. 01 (Civil/Military)
13:00 – 14:00	Lunch		
14:00 – 15:00	Issue No. 03 (Aviation Security)	Issue No. 01 (Civil/Military)	Issue No. 02 (Runway Safety)

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Parallel Session: Technological Events for Delegates (Conference Hall)

Facilitator: Ms. Nancy Graham

Mr. Frederic Lecat, ICAO

Time	Technological Events	Title	Speakers
11:00 – 12:00	Runway Safety Solutions	Boeing's approach to enhancing runway safety	Capt. Robert Aaron, Senior Safety Pilot, The Boeing Company
		Airbus's runway safety philosophy	Dr Logan Jones, Runway Safety Specialist, Airbus – NAVBLUE
12:00 – 13:00	Aviation Security Solutions	SMART SECURITY : An IATA and ACI initiative to enhance security, facilitation and operational efficiency	Mr. SL Wong, Head - Technical & Industry Affairs, Airports Council International
		ACIs Capacity Building Efforts in Security	Mr. SL Wong, Head - Technical & Industry Affairs, Airports Council International
13:00 – 14:00	<i>Lunch</i>		
14:00 – 15:00	ATM Solutions	Benefits of the ASIA PACIFIC AERONAUTICAL NETWORK, CRV	Frederick Chui, Senior Vice President, Global Data Sales & Pre-Sales, PCCW Global
		The Quality Managed Transition of Legacy Aeronautical Information into Database	Erdenebaatar Davaasuren, IFAIMA-APAC Regional Director
		Aeronautical Information Management (AIM) solutions and ICAO AIXM Compliance	Norman Nunn – Vice President Avitech GmbH
		The UAS situation	Mr. Andrew Nabarro Business development manager THALES

15:00 – 15:30 Coffee Break

15:30 – 16:30 DGCA Conference Session

Agenda Item 8: Session on “APAC States’ Needs - Capabilities Matching Process”

Facilitator: Mr. Arun Mishra, Regional Director, ICAO

- Presentation on APAC States’ Needs - Capabilities Matching Process” (by ICAO)
- Discussion

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- 16:30 – 17:00 **Plenary Session:** Agenda Item 7.1, 7.2 and 7.3
Moderator: Dato' Sri Azharuddin Abdul Rahman, DG, DCA Malaysia
Presentation of Outcomes of Breakout Sessions (by Facilitators)
- 18:30 Farewell Dinner hosted by MIAT Company
Venue: Chojjin Lama Museum

DAY 5 (11th August 2017, Friday)

- 09:00 – 10:30 DGCA Conference Session

Agenda Item 9: Other business:

Moderator: Mr. Vanpheng Chanthaphone, DG, DCA of Lao PDR
- APCAC Task Force Report
 - Draft Declaration of Civil Aviation Ministers' Conference
 - Theme Topic for the forthcoming Conference of DGCA's
 - Endorsement of Action Items arising from the Present Conference
 - Suggestion for improvement and feedback on new DGCA Conference format
- 10:30 – 11:00 Coffee Break
- 11:00 – 12:00 Closing Ceremony
- Closing remarks by ICAO Secretary General
 - Closing Remarks by Director General, Civil Aviation Authority of Mongolia
 - Turnover of the ICAO Flag to the Host of the 55th DGCA Conference
 - Address by Director General, Civil Aviation Authority of Fiji
 - Video Presentation — CAA Fiji
 - Presentation of Memento to Director General, CAA Mongolia
 - Closing Message by Regional Director, ICAO APAC Office
- 12:00 – 14:00 Lunch
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AGENDA ITEMS

- Agenda Item 1: Theme Topic –
“The Challenge of Managing Outcome Focused and Risk Based Regulations for Asia Pacific States”
- Agenda Item 2: Review of Action Items arising from the previous Conference
- Agenda Item 3: Aviation Safety and Air Navigation
- Agenda Item 4: Economic Development of Air Transport
- Agenda Item 5: Aviation and Environment
- Agenda Item 6: Technical and Regional Cooperation
- Agenda Item 7: Specific Sessions on Air Navigation Safety & Efficiency,
Aviation Safety and Aviation Security & Facilitation Issues
(Breakout Sessions)
- Agenda Item 8: Session on “APAC States’ Needs - Capabilities Matching
Process”
- Agenda Item 9: Other Business
- a) Theme Topic for the forthcoming Conference of DGCAAs
 - b) Endorsement of Action Items arising from the Present Conference
 - c) Any Other Matters

54th Conference of Directors General of Civil Aviation Asia and Pacific Regions

I. OPENING OF THE CONFERENCE

The 54th Conference of Directors General of Civil Aviation (DGCAs), Asia and Pacific Regions was hosted by Civil Aviation Authority of Mongolia at Shangri-La Hotel.

The Conference commenced with the official opening ceremony at 0900 hours on Monday, 7 August 2017. It was attended by 321 Delegates from 38 States/Administrations, and 12 International Organizations.

The Director General of Civil Aviation Authority of Mongolia, Mr. Byambasuren Luvsansambuu extended a warm welcome to all the delegates of the 54th Conference of the Directors General of Civil Aviation of the Asia and Pacific Regions. He also expressed his gratitude to Dr. Olumuyiwa Benard Aliu, President of the Council of ICAO and Dr. Fang Liu, ICAO Secretary General for their participation in the important meeting of the civil aviation authorities of the Asia and Pacific Regions. The full text of the speech of the DG CAAM is included at **Attachment 1** to this Report.

The ICAO Secretary General, Dr. Fang Liu extended a warm welcome to all the delegates of the 54th DGCA Conference and thanked the CAA of Mongolia for the excellent arrangements. The full text of the speech of ICAO Secretary General is included at **Attachment 2** to this Report.

In his address, the President of the Council of ICAO, Dr. Olumuyiwa Benard Aliu thanked the the Government of Mongolia and Civil Aviation Authority of Mongolia for hosting the Conference. He also expressed ICAO's deep appreciation to Hon. Minister Ganbat Danga and other senior Mongolian government functionaries. Dr. Aliu also expressed that the presence of high level dignitaries of Mongolian Government in this Conference provided a very helpful reminder of the increasing importance of these events to many and challenging objectives for Asia-Pacific air transport. The full text of the address by the President of the Council of ICAO is included as **Attachment 3** to this Report.

In his message, Hon. Jargaltulga Erdenebat, Prime Minister of Mongolia, Government of Mongolia expressed a sincere gratitude to all delegates and participants, who came to Ulaanbaatar, the capital city of Mongolia, to determine a development policy for civil aviation in the region and to strengthen collaboration between the member countries. The full text of the message by Hon. Prime Minister of Mongolia is included as **Attachment 4** to this Report.

In his address Hon. Minister Ganbat Dangaa, Minister of Road and Transport Development warmly welcomed the Delegates of the 54th DGCA Conference. He expressed that the Ministry of Road and Transport Development of Mongolia considered this Conference as an important venue not only for determining the sector policies, but also as a unique opportunity to boost collaboration in the civil aviation community and a platform for exchange of experiences and knowledge. The Hon. Minister wished the success of the Conference. The full text of the address by Hon. Minister of Road and Transport Development, Mongolia is included as **Attachment 5** to this Report.

II. COMMENCEMENT OF CONFERENCE SESSIONS

The first working session of the Conference commenced at 11:30 hours on Monday, 7 August 2017. The ICAO Regional Director, Mr. Arun Mishra, as Secretary of the Conference, welcomed all participants to the 54th Conference of Directors General of Civil Aviation, Asia and Pacific Regions. He drew attention to the salient features of the Conference and highlighted the important issues deliberated during the opening ceremony of the Conference.

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III. ELECTION OF CHAIRPERSON

The ICAO Regional Director called for nominations for a Chairperson of the Conference. The Head of Delegation from Civil Aviation Authority of Sri Lanka, proposed the name of Director General of CAA Mongolia, Mr. Luvsansambuu to be the Chairperson of the 54th Conference of Directors General of Civil Aviation, Asia and Pacific Regions. He provided a brief resume of Mr. Luvsansambuu, illustrious career achievements, wide management experience and expressed confidence that Mr. Luvsansambuu would be able to provide leadership to the Conference. This was supported by the Head of Delegation from Singapore.

Mr. Luvsansambuu assumed the Chair and thanked the delegates for the honour bestowed upon him and for the confidence placed in him. He assured the Conference that he would do his best to discharge the responsibility of facilitating the proceedings of the Conference.

IV. ELECTION OF VICE-CHAIRPERSON

The Chairperson then called for nominations for the Vice-Chairperson. The Head of Delegation from Civil Aviation Authority of Viet Nam proposed Mr. Jan M. K. Sherani, Barrister & Solicitor with the Office of the Attorney-General and Chairman of the Air Transport Licensing Board of Fiji for the position. This was supported by the Head of Delegation from Bhutan. Mr. Jan M. K. Sherani was unanimously elected as Vice-Chairperson of the Conference.

Mr. Sherani thanked the delegates for the honor bestowed on him and informed the Conference that Fiji's intent to host the 55th DGCA Conference in 2018. He extended an invitation to all States/Administrations in the APAC Region and the International Organizations to the 55th DGCA Conference in Fiji.

V. ADOPTION OF THE AGENDA

The Provisional Agenda for the Conference and the Programme for the duration of the Conference were adopted by the Conference.

VI. APPOINTMENT OF MODERATORS

The Regional Director, ICAO APAC advised the Conference that the following delegates had kindly agreed to moderate the respective Agenda Items:

SUBJECT	AGENDA ITEM	MODERATOR
Theme Topic	1	Mr. Kevin Shum
Aviation Safety and Air Navigation	3	Mr. LI Tin-chui, Simon
Economic Development of Air Transport	4	Mr. Ibrahim Faizal
Aviation and Environment	5	Mr. Chula Sukmanop
Technical and Regional Cooperation	6	Air Vice Marshal Ehsanul Gani Choudhury, GUP, ndu, psc

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SUBJECT	AGENDA ITEM	MODERATOR
Specific Sessions on Air Navigation Safety & Efficiency, Aviation Safety and Aviation Security & Facilitation Issues (Breakout Sessions)	7	Dato' Sri Azharuddin Abdul Rahman
Other Business	9	Mr. Vanpheng Chanthaphone

VII. EXPLANATION OF THE WORK PROGRAMME

The Conference Secretary explained the work programme and working arrangements for the Conference. He informed that the working sessions would be as per the programme which had been distributed.

VIII. CLOSING OF THE CONFERENCE

The ICAO Secretary General, Dr. Fang Liu provided closing remarks during closing ceremony of the 54th DGCA Conference. She thanked all the delegates for their enthusiastic participation and openness to engage in the new format of DGCA Conference, and secondly for the very productive results this Conference had achieved. She thanked the CAA of Mongolia for the excellent arrangements of the 54th DGCA Conference and outstanding hospitality for delegates and their spouses. The full text of the closing remarks of ICAO Secretary General is included at **Attachment 6** to this Report.

The Director General of Civil Aviation Authority of Mongolia, Mr. Byambasuren Luvsansambuu thanked all the delegates of the 54th Conference of the Directors General of Civil Aviation of the Asia and Pacific Regions. He also expressed his gratitude to Dr. Olumuyiwa Benard Aliu, President of the Council of ICAO, Dr. Fang Liu, ICAO Secretary General, Mr. Arun Mishra, Regional Director of ICAO Asia Pacific Office and all the delegates for their participation in the Conference. The full text of the closing speech by the Director General of CAA Mongolia is included at **Attachment 7** to this Report.

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AGENDA ITEM 1: THEME TOPIC:

***“The Challenge of Managing Outcome Focused and Risk Based
Regulations for Asia Pacific States”***

Moderator: Mr. Kevin Shum
 Director General of Civil Aviation
 Civil Aviation Authority of Singapore

1.1 6 Discussion Papers and 2 Information Papers were presented under this Agenda Item. Discussion Papers listed below were presented:

REF.	TITLE	PRESENTED BY
DP/1/1	Theme Topic: “The Challenge of Managing Outcome Focused and Risk Based Regulations for Asia Pacific States”	ICAO
DP/1/2	Maximizing the Economic Benefits of Aviation by taking an “Outcome Focused” or “Better Regulation” Approach	IATA
DP/1/4	Performance-Based Regulation in the Asia Pacific Region	New Zealand
DP/1/6	UK CAA Experience of Becoming a ‘Performance Based Regulator’	the United Kingdom
DP/1/7	Outcomes Based SARPS For Environmental and Efficiency Benefits	Kiribati
DP/1/8	Moving Towards a Risk-Based Approach in Safety Management	Singapore

**1.2 DP/1/1 THE CHALLENGE OF MANAGING OUTCOME FOCUSED AND
RISK BASED REGULATIONS FOR ASIA PACIFIC STATES**

1.2.1 This paper highlighted the ICAO Global Aviation Safety Plan (GASP) objectives that called for States to put in place robust and sustainable safety oversight systems and to evolve these progressively into more sophisticated means of managing safety. These objectives are supported with ICAO’s requirements for the implementation of State Safety Programme (SSP) by States and Safety Management Systems (SMS) by service providers.

1.2.2 The paper noted that Asia Pacific Region is geographically vast, culturally diverse and heterogeneous in the maturity of its safety oversight systems and in the implementation of SSP and SMS. As per USOAP CMA, 17 States in the APAC Region had EI lower than the 60%.

1.2.3 The paper also noted that the challenges for the Asia/Pacific States in developing and implementing performance-based regulations were: (i) *Maturity of Safety Oversight Organization of States*; (ii) *Human and financial resources*; and (iii) *Training and qualification of Inspectors*.

1.2.4 The paper further noted the factors that need to be considered before introducing performance-based regulations were: (1) the maturity of State's safety oversight system; (2) effective implementation of SSP/SMS (3) determining what areas would benefit from performance-based regulations; and (4) the capacity of the industry to develop and the CAA to assess non-prescriptive means of achieving the desired outcomes, which typically required additional time and resources.

**1.3 DP/1/2 MAXIMIZING THE ECONOMIC BENEFITS OF AVIATION
BY TAKING AN "OUTCOME FOCUSED" OR "BETTER
REGULATION" APPROACH**

1.3.1 This paper noted that the Aviation as a vital engine for the global economy and a connector of nations, families and businesses. Air transport was generally expected to continue to see strong growth over the next years, particularly in the Asia Pacific region. However, this growth was dependent on ensuring that the aviation system was able to operate under a straightforward regulatory framework that went no further than the outcome required (outcome focused).

1.3.2 The paper also highlighted one of the ways of helping aviation deliver on its potential was by applying a better approach to the sector. These included impact assessments, consultation with stakeholders, simpler wording for better compliance, and regular review of regulations to ensure that they were still necessary. Many governments around the world had already embarked on better regulation initiatives. They should now, had been extended more broadly across the Asia Pacific Region to remove barriers to sustainable growth and unlock the full potential of aviation. The paper invited Member States to incorporate better regulation principles when developing and implementing air transport regulation.

**1.4 DP/1/4 PERFORMANCE-BASED REGULATION IN THE ASIA PACIFIC
REGION**

1.4.1 This paper outlined the benefits of Performance-based regulation, including the ability to address complexity in the aviation sector, adapt to rapid technological change, and respond to changes in the operating environment. The effective implementation of performance-based regulation was supported by comprehensive and robust guidance material and, where appropriate, by supporting requirements.

1.4.2 In order to realise the benefits of performance-based regulation, the paper recognized that the regulators must have had the skills to determine whether a participant was meeting required safety outcomes, and identify when regulatory action may be necessary. The different skills required may enable the employment of those with different backgrounds to that traditionally employed by aviation regulators, creating a larger selection of potential staff.

1.4.3 The paper noted that New Zealand adopted performance-based aviation regulations where possible. The examples discussed in this paper demonstrated how a performance-based approach could address the regulatory challenges facing aviation.

1.4.4 The paper proposed ICAO to facilitate the development and implementation of performance-based regulation by adopting more performance-based SARPs where appropriate; assisting with the development of guidance and supporting requirements; supporting States to develop performance-based regulatory skills; and using the experience of States that had adopted a performance-based approach.

**1.5 DP/1/6 UK CAA EXPERIENCE OF BECOMING A ‘PERFORMANCE
BASED REGULATOR’**

1.5.1 This paper noted that the UK Civil Aviation Authority began its journey to become a Performance Based Regulator in 2011, with a fundamental review of how the organisation wished to deliver regulation in the future. As part of the EASA Regional Safety Oversight Organisation system, the UK CAA’s role was to deliver effective operational oversight and enforcement and this paper described its journey in designing, implementing and embedding a performance-based approach to this role. The role of writing performance based regulations remained with EASA. Following a design and test phase, UK CAA’s formal change programme began in 2015. Initial implementation of tools, processes, and training was complete. The UK CAA was now embedding and refining its approach, which would be complete by spring 2018, and would then fully integrate with all parts of the UK CAA to ensure benefit realisation.

1.5.2 The paper also noted that UK CAA’s ambition was to continually enhance aviation safety performance within both the CAA and across all aspects of the aviation industry by promoting:

- a more open and shared appreciation and awareness of safety risk exposure;
- informed decision making about the focus of oversight and improvement initiatives; and
- securing benefits for industry, directly linked to improvement in the management of safety risk performance.

1.5.3 The paper outlined that in light of UK CAA’s experiences and industry feedback they had continued to refine their approach to implementation of risk and performance based oversight. There was still a significant amount of work to do, but they could see the benefits in persevering, not only for them as the regulator, but also more importantly, for the aviation industry and the consumers of the services they provided. UK CAA was growing in confidence that their ambition to establishing a coherent and enduring approach to continuously decreasing aviation safety risk was within their grasp.

1.5.4 The paper noted that any regulator, embarking on a journey to transition to a more performance-based approach, needed to understand clearly their current regulatory philosophy, their aspirations and the relationship with their industry. The paper further noted UK CAA’s experience, which would suggest that there were aspects of PBR that would deliver benefits for any regulator that wanted to make the change.

**1.6 DP/1/7 OUTCOMES BASED SARPS FOR ENVIRONMENTAL AND
EFFICIENCY BENEFITS**

1.6.1 In the context of improved environmental and efficiency outcomes this paper provided discussion on the application of a performance and outcomes based approach to the wording of SARPs leveraging on the positive foundation already evident in most Annexes. The paper provided two examples in Annex 14 and proposed changes in that Annex to replace current prescriptive wording, where that approach is applicable.

**1.7 DP/1/8 MOVING TOWARDS A RISK-BASED APPROACH IN SAFETY
MANAGEMENT**

1.7.1 The paper highlighted the need for a risk-based approach in safety management, in addition to implementation of State Safety Programmes (SSP), to support ICAO’s global strategy to improving aviation safety.

1.7.2 The paper identified the building blocks and challenges in implementing a risk-based approach in safety management, and shared Singapore's experience in this area, through building a robust safety oversight system, enhancing regulatory capabilities, effective data-management and industry engagement.

1.7.3 In facilitating the region in moving towards a risk-based approach in safety management, Singapore suggested for ICAO to consider moving away from the current 60% EI target, and adopting a differentiated EI target commensurate with States' level and complexity of aviation activities in the next edition of the GASP.

1.7.4 The paper invited ICAO and States to continue supporting existing capability-building efforts, such as COSCAPs and Combined Action Teams, to enhance States' safety oversight capabilities and requested ICAO, where appropriate, to develop guidance material and tools to support a risk-based approach in safety management.

DISCUSSIONS ON THE PAPER PRESENTED

DP/1/2 — India supported IATA concept on consultative regulatory environment to maximize the benefits that aviation brings. India also expressed that the consultative process should not linger too long.

DP/1/4 — Australia, Nepal and Papua New Guinea supported the Performance-Based Regulation (PBR) paper presented by New Zealand. Nepal expressed that there was still lack of sufficient guidance materials on PBR.

DP/1/6 — Australia, Hong Kong China, New Zealand and Papua New Guinea supported the paper presented by UK and noted UK's risk-based oversight regulatory approach was more advance and thanked UK for sharing their implementation experience. Hong Kong China further suggested that the ICAO organize a regional workshop to promote the sharing of knowledge and best practices among States to support implementation of Performance-based Regulations (PBR) and this suggestion was supported by Cambodia, Malaysia, Mongolia and Papua New Guinea.

DP/1/7 — Australia and New Zealand supported Kiribati proposal on review and adoption of the concept of performance and outcomes based approach to SARPs. Australia also expressed that ICAO process for the amendment of SARPs be followed accordingly.

ICAO noted the proposed amendment by Kiribati to RFF-related SARPs in Annex 14, Volume I. ICAO informed the Conference that the ICAO Aerodrome Design and Operations Panel (ADOP) was reviewing and updating, as needed, the RFF-related provisions in Annex 14, Volume I, taking into account a performance-based approach, where appropriate.

DP/1/8 — Australia and New Zealand supported Singapore's approach in safety management.

ICAO informed the Conference that the suggestion made by Singapore for the replacement of the GASP targets with differentiated targets was under discussion in the GASP Study Group.

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AGENDA ITEM 2: REVIEW OF ACTION ITEMS ARISING FROM THE PREVIOUS CONFERENCE

2.1 One Discussion Paper and two Information Papers were received under this Agenda Item. The Discussion Paper was presented:

REF.	TITLE	PRESENTED BY
DP/2/1	Responses from Administrations to Action Items Arising from the 53 rd Conference of Directors General of Civil Aviation, Asia and Pacific Regions	ICAO

2.2 DP/2/1 REPORT ON RESPONSES TO ACTION ITEMS ARISING FROM THE 53rd CONFERENCE OF THE DIRECTORS GENERAL OF CIVIL AVIATION IN ASIA AND PACIFIC

2.2.1 The ICAO Secretariat provided details of the actions taken by various States/Administrations on the Action Items arising from the 53rd Conference of DGCA's.

2.2.2 The Conference was informed that 18 States/Administrations had provided their response. This constituted less than 50 percent of the States/Administrations that the Asia Pacific Office is accredited to. The Conference was also informed that a review of the responses received over the past seven years indicated that hardly fifty percent of the States/Administrations forwarded their responses to the List of Action Items. As such, any analysis would not be a proper representation of the level of implementation at the regional level.

2.2.3 The Administrations that replied supported the Action Items arising out of the 53rd Conference, with most having implemented a majority of the Action Items or indicated plans to do so.

2.2.4 DISCUSSIONS ON THE PAPER PRESENTED

2.2.4.1 The ICAO Secretariat while commenting on the responses from States/Administrations to Action Items arising from the 53rd Conference stressed that it was crucial to have the responses not only to update and raise the profile of the Conference, but more importantly to enhance its effectiveness in implementation. The ICAO Secretariat invited the Conference to review the information provided by the States/Administrations on the follow up of the Action Item and urged to take action as deemed necessary.

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Asia and Pacific Regions**

AGENDA ITEM 3: AVIATION SAFETY AND AIR NAVIGATION

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3.1 26 Discussion Papers and 36 Information Papers were received under this Agenda Item. Discussion Papers listed below were presented:

REF.	TITLE	PRESENTED BY
DP/3/2	Quality and Timeliness of Aeronautical Information	ICAO
DP/3/5	Proposed Global Strategy and Action Plan for the Improvement of Regional Safety Oversight Organizations (RSOOS) and the Establishment of a Global System for the Provision of Safety Oversight	ICAO
DP/3/7	Automation Interface between Flight Information Regions	CANSO
DP/3/8	Managing Interference to Global Navigation Satellite System (GNSS)	IATA
DP/3/9	Initiatives to Promote Safe and Efficient Ground Handling Operations	IATA
DP/3/11	Implementation of Performance Based Communication and Surveillance (PBCS) in Asia Pacific	IATA
DP/3/12	Civil Aviation Regulatory Framework and Performance Based Regulations in Air Navigation	Mongolia
DP/3/13	The Necessity of Collaboration Among Stakeholders and Clarification of Respective Roles for the Challenge	Japan
DP/3/18	Project Loon – Floating Cell Phone Towers in the Sky	CANSO
DP/3/23	Operational and Information Management Framework to Support Cross-Border ATFM Implementation in the Asia Pacific Region	Australia, Cambodia, China, Hong Kong China, Indonesia, Malaysia, Philippines, Singapore, Thailand, CANSO and IATA
DP/3/24	Communication and Coordination on UAS Management	China
DP/3/25	Safety Management Measures	China
DP/3/31	Measures against Dropping Objects	Japan
DP/3/33	Status of Performance Based Navigation (PBN) Implementation in France	France
DP/3/36	GAGAN – Business Case and Mandates	India

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DP/3/37	Risk Based Approach to Managing Safety in India	India
DP/3/38	Similar and Confusing Call Sign	India
DP/3/40	Provisions of Exemption in ICAO Documents Need to be Reviewed	Nepal
DP/3/42	Harmonization of Airport Collaborative Decision Making (A-CDM) Practices	Singapore
DP/3/44	Key Areas in Regulating Unmanned Aircraft Systems (UAS) Operations in Urban Environment	Singapore
DP/3/49	Paving Way for Interoperability of Air Traffic Management System	Hong Kong China
DP/3/56	Flight Standards Oversight Mobile Tools	China
DP/3/58	Cross-Polar Route Network System	the Russian Federation
DP/3/59	Implementation and Efficient Management of ICAO SARPS Regarding Alternative Fire Extinguishing Agent to Halon Fire Extinguishers	Republic of Korea
DP/3/63	The Asia Pacific Data Collection, Analysis and Information Sharing for Aviation Safety Demonstration Project	Japan, Philippines, Singapore, Thailand, IATA, MITRE and FSF
DP/3/68	Guidance Material in Regard to Primary Aviation Legislation Bangladesh	Bangladesh

3.2 DP/3/2 QUALITY AND TIMELINESS OF AERONAUTICAL INFORMATION

3.2.1 ICAO provided information on the Annexes to the Convention on International Civil Aviation (the Chicago Convention) related to aeronautical information, particularly Annex 15 – Aeronautical Information Services (AIS), and the standards for the quality management and timeliness of information and data published in State Aeronautical Information Publications (AIPs).

3.2.2 Examples were provided of poor quality management of aeronautical information and the failure to comply with the requirements for Aeronautical Information Regulation and Control (AIRAC), together with discussion of the safety ramifications of failure to implement appropriate processes.

3.2.3 The Conference was informed that APANPIRG Air Navigation Deficiencies were currently recorded against 23 Asia/Pacific States. ICAO further informed the conference of action that would be taken in the event of evidence poor quality management and timeliness of published aeronautical information.

3.2.4 The paper invited Conference to urge States/Administrations to review their AIM transition plan and ensure that they had fully implemented AIRAC and quality management-related AIM transition steps.

**3.3 DP/3/5 PROPOSED GLOBAL STRATEGY AND ACTION PLAN FOR THE
IMPROVEMENT OF REGIONAL SAFETY OVERSIGHT
ORGANIZATIONS (RSOOS) AND THE ESTABLISHMENT OF A
GLOBAL SYSTEM FOR THE PROVISION OF SAFETY OVERSIGHT**

3.3.1 This paper highlighted the outcome of the Forum on Regional Safety Oversight Organisations (RSOOs) for Global Aviation Safety, which was held from 22 to 24 March 2017 in Ezulwini, Swaziland. The Forum supported the proposed global strategy and action plan for the improvement of RSOOs and the establishment of a global system for the provision of safety oversight.

3.3.2 The paper also noted that the Seventh Meeting of the Regional Aviation Safety Group – Asia and Pacific Regions (RASG-APAC/7), held in Bangkok, Thailand from 3 to 5 July 2017, fully supported the proposal and concluded that ICAO present the proposed global strategy and action plan to improve RSOOs and the establishment of a global system for the provision of safety oversight, including the study of a proposed Global Aviation Safety Oversight System (GASOS), to the 54th APAC DGCA Conference for consideration and support.

3.3.3 The paper invited the Conference to urge States/Administrations to support the proposed global strategy to improve and strengthen existing RSOOs; and, States endorsed the objectives for a global system for the provision of safety oversight, and were encouraged to participate in the study of a proposed Global Aviation Safety Oversight System (GASOS).

DISCUSSIONS: USA and Singapore supported the proposed GASOS and conclusion of the paper. Singapore urged more States to participate in the GASOS Study Group.

**3.4 DP/3/7 AUTOMATION INTERFACE BETWEEN FLIGHT
INFORMATION REGIONS**

3.4.1 CANSO presented a paper on its recent publication entitled Automation Interface Between Flight Information Regions: Best Practice Guide for ANSPs. The CANSO Best Practice Guide addressed the impediment caused by the disparities and the lack of automated connectivity between adjacent ANSPs. The CANSO Guide contained detailed and practical examples of how neighbouring ANSPs can collaborate to enhance cross boundary interfaces and support interoperability and complementary implementation. The Guide was especially pertinent to this region as AIDC implementation was one of the top ten priorities and a critical upgrade recommended in the ICAO Asia Pacific Seamless ATM Plan.

3.4.2 The paper invited Conference to encourage States and ANSPs to expedite the implementation of AIDC between neighbouring FIRS and in doing so, to take into consideration the information available in the CANSO Best Practice Guide.

DISCUSSIONS: Republic of Korea (ROK) supported the implementation of AIDC. ROK informed that they have implemented AIDC between China and Japan and recommended other States to implement AIDC as soon as possible. Singapore supported the implementation of AIDC. Singapore thanked CANSO for developing and publishing guidance material.

**3.5 DP/3/8 MANAGING INTERFERENCE TO GLOBAL NAVIGATION
SATELLITE SYSTEM (GNSS)**

3.5.1 The paper noted that an advanced navigation, and other aviation and air traffic management applications increasingly reliant upon reliable and accurate GNSS. The paper reminded that any instances of harmful interference therefore become relevant to safety of flight operations as well as the efficiency of ATM systems.

3.5.2 The paper emphasized States to in place proactive and robust detection, mitigation and enforcement processes to manage and stop any harmful interference to GNSS for aviation and to ensure the integrity of the system.

3.5.3 The paper also noted that Public Education was important to ensure understanding of the possible impact on aviation and the safety of flight. The paper further noted that close co-ordination with military authorities was important to ensure an advance notification of required military applications to advise operators of possible interference.

3.5.4 The paper invited the Conference to urge States/Administrations to work proactively with their National Telecommunications Authorities to ensure robust detection, management and mitigation processes were in place to address GNSS interference; and ensure that ICAO guidance material was made available and well understood by relevant stakeholders.

DISCUSSIONS: Republic of Korea supported the IATA position and urged other States to work to minimize GNSS interference.

3.6 DP/3/9 INITIATIVES TO PROMOTE SAFE AND EFFICIENT GROUND HANDLING OPERATIONS

3.6.1 The paper noted that IATA, in collaboration with the ground handling industry and other stakeholders, had taken the initiative to develop unifying industry standards and systems that enhance the safety and increase the efficiency of ground handling operations. The paper noted that IATA initiative was designed to achieve cost benefits through the sharing of information that eliminated the need to duplicate the audit of ground handling operations by airlines.

3.6.2 The paper also noted that the approach taken by IATA implemented an Integrated Solution for Ground Operations that comprised the development of harmonized ground handling operations standards and procedures published in the Airport Handling Manual (AHM) and the IATA Ground Operations Manual (IGOM); a standardized approach to the oversight of ground service providers under the umbrella of IATA Safety Audit for Ground Operations (ISAGO); and the establishment of a data-driven IATA Global Aviation Data Management (GADM) - Ground Damage Database (GDDB) system to perform comprehensive safety analysis and monitor safety performance. The paper further noted that the combination of these activities provided tangible benefits and continuous safety improvement through the standardization of safety standards and procedures for ground operations and data driven improvements of safety performance and measurement of corrective actions. The paper noted efficiency benefits achieved through reduced audit redundancy, reduced work complexity, and consistent aircraft turnaround times.

3.6.3 The paper outlined the support and recognition accorded to the IATA initiatives by various industry stakeholders, including regulatory bodies, had bestowed international acceptability and credibility, contributing to a much-needed global standardization of ground handling activities. The paper noted that an appropriate regulatory input to the development of the initiatives was maintained and could be further expanded to ensure they were aligned.

3.6.4 The paper invited the Conference to request States/Administrations and industry to take into account IATA safety audits, or relevant industry standards and guidance.

DISCUSSIONS: Maldives commented on IATA paper and expressed the view of an importance of ICAO involvement to assist regulators in regulating ground handling oversight activities. Malaysia expressed the similar views and requested ICAO to involve in the development of SARPs in the areas of Ground Handling.

ICAO Secretariat welcomed and supported IATAs efforts in the ground handling arena and informed to the Conference IATA's involvement in Ground Handling Task Force (GHTF) which was expert groups of the ICAO Aerodrome Design and Operations Panel (ADOP). The GHTF was tasked with formulating provisions on ground handling and drafting a brand new standalone manual on GH that would address all the main key players in this arena in one document – States, aerodrome operators, aircraft operators, and ground handling service providers. The target date for a mature draft of the manual would be Q4/2018.

**3.7 DP/3/11 IMPLEMENTATION OF PERFORMANCE BASED
COMMUNICATION AND SURVEILLANCE (PBCS) IN
ASIA PACIFIC**

3.7.1 The paper noted that PBCS was an ICAO initiative to provide performance requirements to ensure robust infrastructure and safe operations. The initial focus was on implementation of Performance Based Communications for airspace (remote and Oceanic) that utilizes Controller-Pilot Data Link Communications (CPDLC) to provide separation services.

3.7.2 The paper emphasized the importance for the conference to note that aircraft, which would operate into PBCS airspace (for example North Pacific or North Atlantic) area must have had the Operational Approval from their regulator to do so. This means that many States who did not manage PBCS airspace must still have had approval and monitoring processes in place to ensure that their State registered aircrafts were not adversely impacted.

3.7.3 The Paper also noted that the Asia Pacific Region had agreed to implement PBCS no later than 29 March 2018. This implementation date was supported by APANPIRG/27 conclusions 7 through 9.

3.7.4 The paper raised 6 main concerns/issues as PBCS implementation neared.

- 1) Lack of State readiness to issue operational approval for PBCS;
- 2) Lack of RCP / RSP Statement of Compliance (SOC) for legacy aircraft;
- 3) An alternative to the requirement for commercial contracts between operators and Communication Service Providers (CSPs);
- 4) Role of EMA/RMA Monitoring Agencies regarding PBCS;
- 5) Lack of a global standardized requirement for PBCS data collection and monitoring; and
- 6) Readiness for ANSPs to process, transfer and use PBCS flight plan codes.

3.7.5 The paper further noted that on a specific regional basis there were also a number of items that need to be considered for PBCS implementation:

- Revision of Regional Supplementary Procedures (Doc 7030);
- Readiness of State Regulators to conduct PBCS safety oversight of ANSPs; and
- Availability of baseline statistics on Actual Communication Performance (ACP) / Actual Surveillance Performance (ASP).

3.7.6 The paper invited the Conference to urge States/Administrations to ensure their authorities were aware of and had processes in place to meet the requirements, where applicable, for PBCS operations.

DISCUSSIONS: ROK supported the IATA position and encouraged States to implement PBCS operational approval processes if they have not yet done so.

**3.8 DP/3/12 CIVIL AVIATION REGULATORY FRAMEWORK AND
PERFORMANCE BASED REGULATIONS IN AIR NAVIGATION**

3.8.1 This paper proposed the adoption of a standardized approach to safety oversight of the air navigation service providers in APAC through the development of an ANS Safety Oversight Manual. The paper noted that the proposed manual would be written as a collaborate effort using the resources of RASG/APRAST in collaboration with APANPIRG. The manual would be commensurate with a performance based regulatory approach to compliance.

3.8.2 The paper invited the Conference to encourage the APAC States/Administration to support the creation of the ANS Working Group under RASG, nominate experts to participate in and prioritize the development of an ANS oversight manual for the APAC States.

DISCUSSIONS: ICAO Secretariat informed the Conference that the APANPIRG would be the appropriate platform for establishment of the Working Group as proposed in the paper.

**3.9 DP/3/13 THE NECESSITY OF COLLABORATION AMONG
STAKEHOLDERS AND CLARIFICATION OF RESPECTIVE
ROLES FOR THE CHALLENGE**

3.9.1 This paper presented the review of Japan's efforts and challenges in promoting actions with regard to Collaborative Actions for Renovation of Air Traffic Systems (CARATS), the future vision on air navigation system in Japan, in order to promote modernization in line with GANP in the respective regions. The paper noted that various stakeholders such as aviation authorities, ANSPs and aviation industry, especially States should recognize the necessity to clarify their respective roles in collaboratively addressing the challenges.

3.9.2 The paper invited the Conference to encourage States to provide and share information of best practices in view of harmonization in the region.

3.9.3 The paper further invited the Conference to encourage ICAO to conduct appropriate coordination among States or PIRGs in consideration of interoperability between avionics and air traffic control/management system, evaluation of costs/benefits analysis and challenges for realization and finding suitable solutions.

DISCUSSIONS: Singapore supported Japan's position in ATM System harmonization with ICAO GANP in the region.

**3.10 DP/3/18 PROJECT LOON – FLOATING CELL PHONE TOWERS IN THE
SKY**

3.10.1 This paper presented an update on Project Loon, a high-altitude, heavy, free unmanned balloon network that aimed to bring the internet to underserved parts of the world. The paper outlined the ICAO General Assembly's endorsement of this project, which supported ICAO's No Country Left Behind and was also consistent with the United Nations Sustainable Development Goals. The paper further outlined recent achievements and plans. Project Loon was grateful for ICAO States continuous support.

**3.11 DP/3/23 OPERATIONAL AND INFORMATION MANAGEMENT
FRAMEWORK TO SUPPORT CROSS-BORDER ATFM
IMPLEMENTATION IN THE ASIA PACIFIC REGION**

3.11.1 This paper noted that the Distributed Multi-Nodal ATFM Network project in the APAC Region was initiated in 2014 to better balance traffic demand and capacity. The project was divided into phases. Phase 1 focused on demand-capacity balancing (DCB) for an aerodrome whereas phase 2 targeted DCB for volumes of airspace. The project had seen validation of its concepts and methodology through successful trials in live operational environment for phase 1 and gained recognition through endorsement by the ICAO Asia Pacific ATFM Steering Group. From the successful trials in phase 1, Singapore and Thailand had adopted an operationally ready ATFM service since 1 April 2017.

3.11.2 The paper outlined the development of the Interface Control Document (ICD) by the technical subgroup of Multi-Nodal ATFM Network aimed to ensure effective information management and harmonization of ATFM system to system linkages to support cross-border ATFM operations. A draft preliminary ICD had been submitted to ICAO. The project would now focus on levelling up the capabilities of participating ANSPs for the next phase of the project.

3.11.3 Recognizing the development of ATFM initiatives in other parts of the APAC region, there would be a greater need for this region to work towards harmonizing the developments. The paper noted that the harmonised regional ATFM implementation plan would ensure success in cross-border ATFM application in the APAC region and would pave the way for future expansion of the concept to interface with ATFM of other regions. This would be a step towards creating a globally interconnected and interoperable ATFM framework and was in line with the objectives of the ICAO Global Air Navigation Plan.

3.11.4 The paper invited the Conference to encourage States/Administrations in developing ATFM implementation plans, to harmonize the processes in line with the ICAO Asia Pacific Regional Framework for Collaborative ATFM.

DISCUSSIONS: Hong Kong China informed the Conference that Hong Kong, China was one of the Administrations participated in the Distributed Multi-Nodal ATFM Phase 1 trial. Hong Kong, China recognized the need of cross-border ATFM in the APAC Region to cope with the significant growth of air traffic and would continue to support the project. However, Hong Kong, China noted that gaps in the ATFM Network connectivity existed and could lead to divergence of ATFM processes and procedures. This was specifically impacting the application of coherent and quantifiable delays to upstream stakeholders. As such, Hong Kong, China urged States to facilitate and ICAO to continue to assist in harmonizing the formation of a single ATFM Network in accordance with the target stated in the Asia Pacific Framework for Collaborative ATFM Phase 2.

ICAO Secretariat informed the Conference that the paper on ATFM from the group of States including Singapore was very welcomed because its message re-affirmed support for the APANPIRG-established regional direction on ATFM.

**3.12 DP/3/24 COMMUNICATION AND COORDINATION ON UAS
MANAGEMENT**

3.12.1 This paper presented actions by China on developments and managements of UAS. The paper noted that in recent years Unmanned Aircraft System (UAS) had developed rapidly around the world, and became a new way of aviation activities, which was constantly being integrated into the existing civil aviation system. The paper also noted that ICAO established RPASP and Small UAS AG, and ICAO APAC launched UAS TF.

3.12.2 The paper highlighted that China actively carried out UAS management research, such as UAS registration, operated personnel training and licensing, aircraft operation, protection airspace or area (Geo-fencing applications), air traffic services and the ATC contingency procedure for illegal or unknown UAS, etc. in order to deal with challenge of UAS development in China.

3.12.3 Considering the challenges on UAS development and operation, the paper invited the Conference to encourage the coordination and cooperation on UAS management among States of APAC, continue to play an effective role in ICAO APAC Unmanned Aircraft Systems Task Force.

DISCUSSIONS: Hong Kong, China expressed sincere thanks to China for sharing their experience of and their excellent work done on UAS Management, including UAS regulation, training, which served as very useful references for the review being conducted in Hong Kong China. Hong Kong China requested ICAO to arrange workshop to facilitate more in-depth sharing of relevant UAS management experience.

ICAO Secretariat informed the Conference about ICAO Activities relating to Unmanned Aircraft Systems (UAS), such as, Second Remotely Piloted Aircraft Systems (RPAS) Symposium, to be held in Montreal, Canada, from 19 to 21 September 2017 (State Letter AN 13/66-17/21 dated 1 March 2017) and DRONE ENABLE (ICAO's UAS Industry) Symposium, being held from 22 to 23 September in Montreal (State Letter AN 13/71-17/61 dated 10 May 2017) immediately following the RPAS Symposium.

3.13 DP/3/25 SAFETY MANAGEMENT MEASURES

3.13.1 This paper presented a series of measures taken by Civil Aviation Administration of China (CAAC) in recent years in the area of the continuous implementation and effective oversight of Safety Management System (SMS) and the subsequent outcomes, and puts forth recommendations with respect to the implementation and continuous oversight of SMS.

3.13.2 This paper noted that SMS implementation was a long-term process requiring continuous improvement. The paper outlined CAAC's practices, which revealed that safety performance management was a breakthrough point in enhancing SMS efficiency in the current stage. By conducting follow-up research on an on-going basis, organizing training sessions and experience exchanges, and learning from the practical experiences and best practices adopted by other countries, the CAAC recommended ICAO to develop standards on safety performance data collection, to standardize the data collection and safety performance monitoring by the contracting States and enhance their risk prevention capability.

3.14 DP/3/31 MEASURES AGAINST DROPPING OBJECTS

3.14.1 The paper noted that Japan had implemented various measures against dropping objects and was studying further measures. This paper invited the Conference to urge member States/Administrations to note that measures against dropping objects derived from the collaboration between airlines including foreign ones were quite effective, cooperate with Japan as necessary, and note that Japan was conducting further studies on effective measures.

**3.15 DP/3/33 STATUS OF PERFORMANCE BASED NAVIGATION (PBN)
IMPLEMENTATION IN FRANCE**

3.15.1 This paper provided a status report of France Performance Based navigation (PBN) implementation. The paper noted that the En-route PBN network based upon RNAV 5 in France was mature, therefore most recent efforts were devoted to Terminal and Approach and Landing phases of flight implementation, through respectively the RNAV 1 and RNP APCH PBN navigation specifications.

3.15.2 The paper also noted that significant efforts had been made in France to meet ICAO A37-11 PBN resolution targets over more than 200 runway ends, and the target could be met for 2D PBN, while the vertical guidance (3D) would require a couple of years of delay, due to the late availability of vertical guidance technologies in Europe. The paper further noted that the PBN implementation allowed France to reduce seriously its ground based navigation infrastructure, starting with ILS, and France was now addressing VOR and NDB rationalization through minimal networks design.

3.15.3 The paper outlined two main lessons learned related to Terminal area PBN implementation, and for PBN approaches, which would require a greater attention from the aviation community. For terminal areas, forcing States to transition to the latest PBN technology (e.g. RNP 1 alternatively to RNAV 1) would create issues with fleet equipage and reversion procedures in case of standing GPS loss, and had to be avoided. For approaches, there was a need to transition in the longer term from the less performing technologies (ABAS and baroVNAV) to the most performing technology (SBAS), but this required careful conditions around fleet equipage and required a global roadmap.

DISCUSSIONS: ICAO suggested that France should have also provided information about the PBN implementation for the French Islands in the APAC Region.

3.16 DP/3/36 GAGAN – BUSINESS CASE AND MANDATES

3.16.1 This paper noted that India had carried out a detailed study for its business case within India in coordination with all the stakeholders since the discussion on GAGAN implementation program and its utilization for Asia Pacific States at the 53rd Meeting of DGCA. The paper also noted that the overall benefit for scheduled commercial operators would be substantial over a span of 20 years between fiscal years 2018 and 2037. The paper further noted that India had decided to mandate new aircraft registered in India with GAGAN capability for Approach with Vertical Guidance (APV approaches) after 1st January 2019 and retrofit by 1st January 2024 in line with National Civil Aviation Policy.

3.16.2 The paper invited the Conference to encourage States for early SBAS implementation by considering the collaborative approach among Asia Pacific States.

DISCUSSIONS: ICAO noted that this was general invitation to neighboring States to consider use of GAGAN. India intended mandates for forward fit in 2019 and retrofit in 2024 were noted.

3.17 DP/3/37 RISK BASED APPROACH TO MANAGING SAFETY IN INDIA

3.17.1 This paper outlined ICAO Annex 19 requirements for States to develop operating regulations on Safety Management Systems (SMS), which was risk based management system, required to be implemented by aviation service providers.

3.17.2 The paper noted that India had developed State Safety Programme (SSP) and Specific operating regulations for establishment of the SMS among the service provider.

3.17.3 The paper further noted that India had established Seven State Safety priorities and associated safety performance indicators, objectives and yearly targets. This had enabled India to establish a basic State Acceptable Level of Safety Performance (ALoSP) and a State Safety Plan available on DGCA website www.dgca.nic.in.

3.17.4 Based on the analysis and the experience gained, India was in the process of further accurately defining the ALoSP. At the service provider level, India was in the process of the acceptance of the Safety Performance Indicators of the mature service providers, and implement risk based oversight.

DISCUSSIONS: ICAO informed the Conference that ICAO was planning to post examples of SMS implementation for design and manufacturing in ICAO Safety Management Information website and requested States to identify and provide some good examples.

3.18 DP/3/38 SIMILAR AND CONFUSING CALL SIGN

3.18.1 This paper highlighted that the use of similar call signs by aircraft operating in the same area, at the same time, and on same frequency often give rise to potential and actual confusion leading to misunderstanding between pilots of different aircraft/pilots and controllers. As a result, one aircraft might act on the clearance meant for another aircraft. This had led to serious incident involving loss of communication, level bust, loss of separation, Airprox, or a mid-air collision.

3.18.2 The paper noted that in India 3 percent of Airprox incidents had taken place due to call sign confusion. The paper further noted that India had issued AIC 02 of 2017 prescribing guidelines on avoiding Confusing/Similar Call-Signs by Airline Operators to avoid the confusion on call signs.

3.18.3 The paper outlined that all airline operators operating to and from India to comply with the requirements contained in AIC 02 of 2017 published on DGCA website <http://www.dgca.nic.in/rules/aero-ind.htm>.

3.19 DP/3/40 PROVISIONS OF EXEMPTION IN ICAO DOCUMENTS NEED TO BE REVIEWED

3.19.1 This paper noted that the practices of exemption or exception were widely used to facilitate the civil aviation operations. States had to issue exemptions in different areas of aviation field to facilitate the air transport activities. Exemptions were issued when operators or service providers were unable to comply with certain provision of State regulations or procedures.

3.19.2 The paper also noted that the ICAO Doc 9734 – Safety Oversight Manual Part A “The establishment and management of a State's Safety Oversight System” seemed to be the main source of USOAP PQs relating the exemptions. Doc 9734 had made clear outline on the exemption relating to the aerodrome operations. However, there were numbers of PQs in USOAP relating to the exemption in audit areas of PEL, OPS and AGA. Exemption or exception was a common practice in aircraft maintenance/airworthiness area. Nevertheless, there was not any such provision outlined in ICAO documents relating to exemption on PEL, OPS and AIR.

3.19.3 The paper further noted that the objective of USOAP audit was to assess the compliance of ICAO SARPs, associated procedures, guidance materials and practices adopted by ICAO. USOAP PQs reflected the provision of applicable Articles of Chicago Convention, SARPs of the Annexes, provision of guidance materials and relevant procedures. In this light, ICAO PQs needed to be congruent to the existing provisions of applicable Annexes and other associated documents. The paper invited the Conference to recommend ICAO to provide more guidance on exemption covering all relevant areas.

DISCUSSIONS: The ICAO Secretariat informed the Conference that “ICAO Doc 9734 – Safety Oversight Manual, Part A” contained guidance on the provision of exemptions/exceptions. The Doc 9734 was complemented by multiple technical documents that detailed the provision of exemptions/exception in relevant areas, including: Doc 9379 - Manual of Procedures for Establishment and Management of a State's Personnel Licensing System, Doc 9284 – Technical Instructions for the Safe Transport of Dangerous Goods by Air, Doc 9760 – Airworthiness Manual, Doc 9774 – Manual on Certification of Aerodromes, Doc 9981 – Procedures for Air Navigation Services Aerodromes. The details included in all documents were considered enough to support the assessment of PQs related to exemptions/exceptions in all relevant areas. The Secretariat welcomed Nepal in providing feedback to the Secretariat on which specific aspects might require additional guidance.

3.20 DP/3/42 HARMONIZATION OF AIRPORT COLLABORATIVE DECISION MAKING (A-CDM) PRACTICES

3.20.1 The paper noted that A-CDM was a proven concept which aimed to optimise airport operations by improving the predictability of operational events. A-CDM involved sharing of accurate and timely information amongst airport partners by means of a common toolset and application of pre-defined processes and procedures. The paper also noted that several States/Administrations within the Asia Pacific Region had started the implementation of A-CDM as it could improve utilisation of existing capacity and enhance operational efficiency to cope with rising air traffic demand in the region.

3.20.2 The paper emphasized that States/Administrations would need to recognise the importance of harmonisation in A-CDM practices in the Asia Pacific Region as it would interface with the processes of aircraft operators and cross border ATFM network. States/Administrations were encouraged to participate in the ICAO Asia/Pacific Airport Collaborative Decision Making Task Force (APA-CDM/TF) as it provided an excellent platform to share best practices and progress on issues related to A-CDM implementation and harmonisation.

3.20.3 The paper highlighted that A-CDM could also effectively support cross-border ATFM operations. A-CDM could further optimize operations at the airport by taking into consideration ATFM measures. The region's ATFM and local A-CDM network would complement each other and together, create a seamless air traffic environment.

3.20.4 The paper invited the Conference to work towards harmonization of A-CDM practices in APAC Region and to participate in the ICAO Asia/Pacific A-CDM/TF and implement A-CDM taking into account the cross-border ATFM operations.

DISCUSSIONS: CANSO underlined the point made by Singapore in its ATFM and A-CDM papers that it was important for ANSPs in the region to work closely with airports to drive A-CDM even as they focused on ATFM. This was because both A-CDM and ATFM were closely linked and mutually supportive. CANSO referred the conference to IP3/6 regarding CANSO's efforts to help ANSPs drive A-CDM and ATFM implementation.

**3.21 DP/3/44 KEY AREAS IN REGULATING UNMANNED AIRCRAFT
SYSTEMS (UAS) OPERATIONS IN URBAN ENVIRONMENT**

3.21.1 This paper shared Singapore's experience in regulating Unmanned Aircraft Systems (UAS) in Singapore, and noted the rising demand to perform increasingly complex operations in high risk areas, such as, aerodromes and densely populated areas. Singapore had identified the following key areas to address, in regulating UAS operations in an urban environment: (i) establishment of a UAS traffic management system to incorporate UAS operations safely and efficiently into our airspace; (ii) enable beyond visual range operations; (iii) the need to keep pace with new UAS applications; and (iv) to manage the proliferation of UAS operators.

3.21.2 The paper outlined that Singapore had spearheaded a number of initiatives to review adequacy of the current set of regulatory requirements, and effectiveness of its governing processes to address those challenges. The paper also noted Singapore's efforts that served to improve the versatility of the existing regulatory framework, which was essential for regulators to keep pace with the fast moving UAS industry. In conclusion, the Conference invited states to discuss and prioritise the development of solutions in the key areas identified and share their experience at the ICAO Unmanned Aircraft System Industry Symposium in September 2017.

DISCUSSIONS: Hong Kong China expressed sincere thanks to Singapore for sharing their experience of and their excellent work done on UAS Management, including UAS regulation, training, which served as very useful references for the review being conducted in Hong Kong, China. Hong Kong, China requested ICAO to arrange workshop to facilitate more in-depth sharing of relevant UAS management experience.

ICAO Secretariat informed the Conference on ICAO activities relating to UAS, such as, Second Remotely Piloted Aircraft Systems (RPAS) Symposium (State Letter AN 13/66-17/21 dated 1 March 2017) and DRONE ENABLE (ICAO's UAS Industry) Symposium (State Letter AN 13/71-17/61 dated 10 May 2017) to be held in Montreal, Canada from 19 to 21 September and from 22 to 23 September 2017 respectively.

**3.22 DP/3/49 PAVING WAY FOR INTEROPERABILITY OF AIR TRAFFIC
MANAGEMENT SYSTEM**

3.22.1 This paper highlighted the new Air Traffic Management System (ATMS), which was successfully commissioned in November 2016 in Hong Kong. The ATMS was designed to meet the latest international aviation standards on technical, safety, ATC operational and maintenance requirements and was on par with the most advanced international air traffic management technologies. The paper noted that the ATMS could handle the projected air traffic growth, including that to be brought by the development of the three-runway system of the Hong Kong International Airport. The paper further noted that the ATMS had performed well during the peak air traffic flow of the festive periods as well as under severe weather conditions since its commissioning.

3.22.2 The paper outlined that in the Asia Pacific (APAC) Region, various ATMS suppliers were engaged to implement new ATMS for replacing the old ATMS. In light of the fact that globally accepted performance-based requirements and standards were generally lacked for ATMS, the overall system architecture, functions and human-machine interface of ATMS developed by different suppliers were vastly diversified, causing interoperability issues among ATMS operated by various ANSPs.

3.22.3 With a view to providing standardized functions and operations resulting in interoperable, consistent and predictable Air Traffic Management Service across States and regions, Hong Kong, China had spearheaded the forming of an international Users' Group for ATMS users to share operational and technical experience, and to map out the future system development roadmap. The outcome could be beneficial for the APAC Regions and ICAO in respect of development of the global roadmap and performance-based requirements of the ATMS.

3.22.4 The paper invited the Conference to seek support from the ICAO in encouraging APAC States/Administrations to conduct seminars/workshops/user groups to facilitate subject matter experts and ATMS suppliers to share experience paving way for interoperability of ATMS.

DISCUSSIONS: Singapore supported Hong Kong, China position to seek support from the ICAO in encouraging APAC States/Administrations to conduct seminars/workshops/user groups to facilitate subject matter experts and ATMS suppliers to share experience paving way for interoperability of ATMS.

3.23 DP/3/56 FLIGHT STANDARDS OVERSIGHT MOBILE TOOLS

3.23.1 This paper outlined Civil Aviation Administration of China (CAAC) flight standards oversight mobile tools, briefly introduced the CAAC Flight Standards Oversight Program (FSOP) and its subsystems, and discussed the main functions as well as the current status of oversight mobile tools promotion and usage. The paper invited the Conference to notify States/Administrations in the APAC region that the oversight mobile tools would be used in ramp inspection of the airlines operating in China.

3.24 DP/3/58 CROSS-POLAR ROUTE NETWORK SYSTEM

3.24.1 This paper provided information on the provision of air traffic services and airspace management in the Russian Federation, including the use of main international transit route systems. Given the importance of ensuring further growth of air traffic operating on international Cross-Polar routes, it was proposed to address the issue of resource mobilization in order to achieve sustainable development of air traffic on the designated route system.

DISCUSSIONS: India raised safety issues regarding emergency landings in polar airport.

IATA supported the paper presented by the Russian Federation and appreciated for good work in polar operations and route optimization. USA, Japan, Mongolia and China participated in the work. Operations during emergency recovery had been considered by the Russian Federation Working Group (WG), and the WG recommendations had supported fuel reductions and emissions reductions.

3.25 DP/3/59 IMPLEMENTATION AND EFFICIENT MANAGEMENT OF ICAO SARPS REGARDING ALTERNATIVE FIRE EXTINGUISHING AGENT TO HALON FIRE EXTINGUISHERS

3.25.1 This paper noted that the establishment and application of international standards of environmental protection was significant for sustainable development of air transport. The development and use of alternative materials to Halon, which was used for the fire extinguishing systems of engine nacelles/APU and cargo compartments, had been requested in order to protect the ozone layer.

3.25.2 The paper also noted ICAO's active roles in preparing international standards; however, certification of alternative materials had been postponed. Consequently, the implementation of SARPs had also been postponed by two years from the end of 2016. As such consequences had caused confusion in Member States regarding its implementation, it was necessary to discuss and pay more attention to the issue. In order to minimize the unnecessary discharge of Halon owned by Member States, it was necessary to devise efficient management methods; for example, requesting fire extinguisher manufacturers to recharge in order to prevent any unnecessary discharge into air.

DISCUSSIONS: ICAO Secretariat informed the Conference the conclusion of A39.WP.36. TE.06: (1) Halon replacement would continue to require the full cooperation and coordination of all stakeholders to advance the development of viable alternative agents. To this end, ICAO would continue to collaborate with all stakeholders to develop solutions. (2) It was recommended that ICAO consider mandating the replacement of halon in cargo compartments of civil aircraft for which a new application for Type Certification has been submitted on or after 31 December 2024. This timeframe would allow enough time for the manufacturers to transition to a non-halon alternative for new aircraft type designs and for States to certify such aircraft. (3) The procurement of halon was exclusively from recovery, reclaiming and recycling of halon and as halon reserves decline, it was expected that the rising cost of halon would provide a market incentive which, combined with the regulatory mandate, would drive industry to accelerate the transition to non-halon alternatives as well as to minimize waste of existing reserves. The continued industry-led efforts to achieve common solutions and realistic timeframes were worthy of recognition and support.

3.26 DP/3/63 THE ASIA PACIFIC DATA COLLECTION, ANALYSIS AND INFORMATION SHARING FOR AVIATION SAFETY DEMONSTRATION PROJECT

3.26.1 The paper established the need for exchange of safety information at the regional level, to support ICAO's efforts in improving safety through safety information sharing, as encapsulated in the Global Aviation Safety Plan and Annex 19.

3.26.2 The paper shared the progress on a Regional Data Collection, Analysis and Information Sharing for Aviation Safety Demonstration Project, where Flight Safety Foundation (FSF) and MITRE had been collaborating with Asia Pacific States, ANSPs and industry stakeholders to initiate a Demonstration Project of a regional data collection, analysis and information sharing system for aviation safety (AP-SHARE). A Coordination Meeting was held amongst Japan, Singapore, the Philippines, Thailand and industry on December 2016 to discuss the Governance Plan, which sets out the core principles guiding this project, roles and responsibilities of all participants, as well as expectations for the process to achieve Industry/Government collaboration. The Governance Plan had since been finalised.

3.26.3 Interested States and industry stakeholders were encouraged to provide FSF and MITRE a Statement of Intent (SOI) to participate in the Demonstration Project. The paper noted that to date, seven entities have submitted the SOI, namely Japan, the Philippines, Singapore, All Nippon Airways, Japan Airlines, Singapore Airlines, and IATA.

3.26.4 Furthermore, the paper invited the Conference to encourage States and industry stakeholders to attend the first Working Group and Governing Board meetings of the Demonstration Project in end September 2017. Participation in the Governing Board meeting would also be extended to observer States and industry.

DISCUSSIONS: New Zealand supported the paper and noted the progress made to date in this initiative and encouraged more States to participate in this project.

**3.27 DP/3/68 GUIDANCE MATERIAL IN REGARD TO PRIMARY AVIATION
LEGISLATION BANGLADESH**

3.27.1 This paper outlined the impediments faced by Bangladesh while drafting Bangladesh Primary Aviation Acts, in particular, Civil Aviation Act 2017 and Civil Aviation Authority Act 2017. The paper noted that the State had hurdles to promulgate fresh Primary Aviation Legislation. The paper also noted that unavailability of required comprehensive guideline and guidance material was the root cause of the hindrance. As Audit area -1 and CE -1, LEG carried higher significance, yet it did not have any dedicated elaborate guidelines.

3.27.2 The paper also noted that Bangladesh considered the following steps as work plan that might be useful for States to ease up the impediments:

- A Working Group (WG) could be formed to study the matter combining States.
- A thorough study should be done by the WG on how to establish a common baseline requirement for any Aviation related Primary Legislation and a legislative platform for all. States that falling behind should have had an easy path to establish Aviation Legislation and it was better once the States could create one stop solution.
- Tracking the example of Annex 19 (Separate SARPs for SMS-SSP), WG might study the feasibility of having a separate group of SARPs (as a form of fresh Annex) for Legislative framework for the states. A dedicated ICAO DOC (GM) on Aviation Legislation may be considered. In any of the above cases may be, a “Pamphlet” for Primary Aviation Legislation should be incorporated as attachment as a reference (not as an obligatory element) for States to frame Aviation Legislation.

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AGENDA ITEM 4: ECONOMIC DEVELOPMENT OF AIR TRANSPORT

Moderator Mr. Ibrahim Faizal
Chairman
Maldives Civil Aviation Authority

4.1 3 Discussion Papers and 5 Information Papers were received under this Agenda Item. The Discussion Papers listed below were presented:

REF.	TITLE	PRESENTED BY
DP/4/1	ICAO's Work for Economic Development of Air Transport	ICAO
DP/4/7	Economic Benefits of Code-Share, Co-Terminal and Own-Stopover Rights	Cambodia, New Zealand, Singapore
DP/4/8	Pakistan CAA Perspective on ICAO Policies/Guidelines Relating to the Economic Development of Air Transport	Pakistan

4.2 DP/4/1 ICAO'S WORK FOR ECONOMIC DEVELOPMENT OF AIR TRANSPORT

4.2.1 The ICAO Secretariat presented a paper, which reported on ICAO's priority work under the Strategic Objective – Economic Development of Air Transport. As described in the ICAO Business Plan, the work programme under this Strategic Objective aims at enhancing capabilities of States to: a) improve air connectivity, create more competitive business opportunities, increase consumer's benefits and choices, and reduce financial burden and costs in performing regulatory oversight functions; and b) enable aviation to serve as an effective means to achieve economic development, in particular, increase accessibility to funding for aviation infrastructure development and investment in air connectivity.

4.2.2 The paper summarized the progress of the follow-up work to the Sixth Worldwide Air Transport Conference (ATConf/6) related to air transport policy and regulation, as well as infrastructure management and funding/financing. Particular attention was paid to the development of international agreements on liberalization of market access, air cargo and air carrier ownership and control. The Air Transport Regulation Panel (ATRP) examined the draft text of the agreements and reached general agreement on certain provisions of an administrative and technical nature, while other core elements of the agreement involving the exchange of commercial rights and safeguard provisions remain open for discussion. The final draft text of the agreements would be presented to the next panel meeting in mid-2017, followed by consideration of the Council of ICAO.

4.2.3 The paper also presented ICAO's work related to aviation data and analyses, which focuses on big data (for example, Automatic Dependent Surveillance – Broadcast (ADS-B) System data and Market Intelligence Data Transfer (MIDT) data), business analysis tools, air traffic forecasts, with the establishment of a joint venture model, at the specific project level, in collaboration with partners. According to the latest long-term air traffic forecasts, global passenger and freight traffic will grow at +4.6 per cent and +4.4 per cent respectively, on an annual basis to 2032. All route groups involving Central Southwest Asia outpace the global growth.

4.2.4 The implementation of the work programme described above supports ICAO's No Country Left Behind (NCLB) initiative, with a view to contributing to enhancing economic sustainability of air transport.

4.2.5 The Conference was invited, inter alia, to proactively support ICAO's work for Economic Development of Air Transport and encourage to contribute to the Air Transport Fund for the implementation of various air transport projects.

DISCUSSION: Republic of Korea highly appreciated ICAO's Work for Economic Development of Air Transport and supported the ICAO paper.

4.3 DP/4/7 ECONOMIC BENEFITS OF CODE-SHARE, CO-TERMINAL AND OWN-STOPOVER RIGHTS

4.3.1 This paper noted that airlines have increasingly used code-share arrangements, co-terminal and own-stopover operations to expand their networks and improve service to passengers. This paper identified the economic benefits of liberalising these rights to economies, passengers and airlines, through increasing air connectivity and access to secondary cities as well as stimulating greater air travel demand, and advocated their liberalisation alongside the liberalisation of 3rd, 4th and 5th freedom traffic rights.

4.3.2 The paper invited the Conference to (i) recognise the benefits of liberalising third-party code-share, domestic code-share, co-terminal and own-stopover rights, to economies, passengers and airlines; and (ii) encourage states to liberalise these rights as part of the wider liberalisation of market access.

DISCUSSION: Republic of Korea and AAPA fully supported the paper presented by Cambodia, New Zealand and Singapore.

The United States also supported the paper. The United States included the rights, as described in the paper, in their open-skies agreements. The United States also expressed its' view that, to realize the benefits that could be derived from liberalization of air services, these rights should be included as part of market access liberalization.

The ICAO Secretariat commented that the subject matters discussed in the Singapore paper were often referred to as "doing business matters" in the context of regulation of international air transport. While these matters were normally subject to applicable regulations by and between States (including through bilateral air service agreements), ICAO had some guidance material for the liberalization of some "doing business matters", which could be found in ICAO Doc 9587, *Policy and Guidance Material on the Economic Regulation of International Air Transport*, and Doc 9626 – *Manual on the Regulation of International Air Transport* for optional use by States.

4.4 DP/4/8 PAKISTAN CAA PERSPECTIVE ON ICAO POLICIES/GUIDELINES RELATING TO THE ECONOMIC DEVELOPMENT OF AIR TRANSPORT

4.4.1 This paper noted that the aviation industry, especially with regards to airline operations, had seen major paradigm shifts following the developments in the air transport industry since the Chicago Convention in 1944. The paper outlined major two points for discussion: a) Carriage of the so-called 6th Freedom of the Air; and b) Provisions relating to Fair Competition and Safeguards contained in Bilateral/Multilateral Air Services Agreements.

4.4.2 The paper also noted that the International Air Transport Agreement inked as a result of the Chicago Convention conceptualized and theorized the first five freedoms of the air. However, with the passage of time and with the realization of benefits associated with differing airline business models, today, there existed a growing number of airlines building their entire business models on the hub-and-spoke business models and thereby indulging themselves in the carriage of the so-called sixth (6th) freedom of the air.

4.4.3 However, given the quantum of 6th freedom carriage by airline operators around the globe, there was an ever growing need to not only classify and recognize the 6th freedom of the air but to research, devise and develop a mechanism to regulate such carriage, especially in circumstances where bilateral Air Services Agreements were not fully liberalized. As the said carriage may not only jeopardize the enormity of bilateral relations between two Contracting States but may also have its impacts on the philosophies of fair and equitable opportunities and fair competition.

4.4.4 The paper further noted that while bilateral/multilateral Air Services Agreements contained provisions relating to Fair Competition and Safeguards, it may be opined that such provisions existed for the purpose of their inclusion only and lack a general subject matter detail thereof considered essential for appropriately addressing such related subject matters by the Aeronautical Authorities of concerned States. Furthermore, certain provisions relating to Safeguards in Air Services Agreements may, in essence, be the resultant phenomenon of free and open market competition thereby warranting the need for further elaboration as to what constituted fair competition or the otherwise, how may fair competitive practices be distinctly distinguished from anti-competitive practices, what quantified measures may be used to distinguish between fair and unfair competition and what possible approaches, both qualitative and quantitative, may States had at their disposal to deal with such matters. This paper also stressed the need for the inclusion of the afore-mentioned discussion issues in the respective provisions of bilateral/multilateral Air Services Agreements.

4.4.5 The paper invited the Conference to recommend to and encourage the International Civil Aviation Community to work together with the view to consider the resolution of issues raised in the paper.

DISCUSSIONS: Republic of Korea shared the opinion that guidance was required to ensure competitive fairness.

The United States expressed their concerns with the position and proposals put forward in the paper submitted by Pakistan. The United States disagreed with the basic premise of the paper – that ICAO should consider official recognition of the so-called 6th freedom of the air and develop policy guidelines or regulations for 6th freedom traffic, particularly with respect to fair competition, means of quantifying what is fair or unfair competition, and the need for safeguards:

- First, as a more technical matter, the so-called 6th freedom was not simply a mix of the 3rd and 4th freedoms as the paper asserted, but rather it was a part of 5th freedom traffic.
- States negotiated these rights with the full understanding of the benefits they included; benefits gained through hubbing services, cooperative marketing arrangements, and network competition. States had been effectively negotiating the exchange of these rights, and reaping the benefits, for more than 70 years.
- The United States had been a leader and advocated in discussions at ICAO on the benefits of liberalization for the aviation industry and the consumer, and on the benefits of maximum reliance on market forces rather than government intervention or safeguards.

- Rather than attempting to set international standards or guidelines for defining what was a pro - or anti-competitive practice, as proposed ICAO safeguards would do, and as Pakistan's paper suggested, the United States submitted that the more useful and effective approach was for Member States to engage in regulatory cooperation with their aviation partners and that ICAO continued to facilitate regulatory cooperation as it had been doing through the ICAO Air Services Negotiation (ICAN) and by convening competition authorities at regular intervals at conferences and symposia.

The ICAO Secretariat commented that the issues of “6th Freedom Traffic Rights” raised by the Pakistan CAA were generally governed by States’ bilateral air service agreements, which were also subject to interpretation or negotiation between concerned parties. This subject and related issues were described in Part 4, Chapter 4.1, section 4 of the ICAO Doc 9626 – *Manual on the Regulation of International Air Transport*. On the subject of “fair competition or safeguards”, issues in this respect were also subject to States’ applicable policies and regulations, which may differ amongst States. In this regard, ICAO had guidance material on safeguards and fair competition, which could be found in ICAO Doc 9587 – *Policy and Guidance Material on the Economic Regulation of International Air Transport* (Third Edition, Part 1, Section F on Participation and Safeguards, and Part 7, Section C on Competition. The issue of safeguards or fair competition was also being examined by the ICAO Air Transport Regulation Panel (ATRP) in the context of its work in developing an international agreement for the liberalization of market access, as recommended by the Sixth Worldwide Air Transport Conference (ATConf/6).

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**54th Conference of Directors General of Civil Aviation
Asia and Pacific Regions**

AGENDA ITEM 5: AVIATION AND ENVIRONMENT

Moderator Mr. Chula Sukmanop
Director General
Civil Aviation Authority of Thailand

5.1 7 Discussion Papers and 5 Information Papers were received under this Agenda Item. Discussion Papers listed below were presented:

REF.	TITLE	PRESENTED BY
DP/5/1	International Civil Aviation and the Environment	ICAO
DP/5/3	Towards Implementation of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) – Australia’s Experience	Australia
DP/5/4	Planning and Construction of Beijing New Airport as a Sponge Airport	China
DP/5/7	Indonesia Visions on ICAO Short-Term Priorities: Alternative Fuels and the Challenge of Implementing New CORSIA Regulations (SARPS)	Indonesia
DP/5/9	Views and Efforts of Japan on Monitoring CO2 Emissions from Aviation	Japan
DP/5/11	Energy Management at Indian Airports through Use of Solar Power	India
DP/5/12	Use of Sustainable Alternative Fuels for International Aviation	Singapore

5.2 DP/5/1 INTERNATIONAL CIVIL AVIATION AND THE ENVIRONMENT

5.2.1 The ICAO Secretariat presented a paper on recent developments within ICAO in the field of aviation and the environment.

5.2.2 The paper summarized the results of the 39th Session of the ICAO Assembly, and the work undertaken by the Organization to date to make progress on the environmental objectives set by Assembly Resolutions A39-1, A39-2 and A39-3. In particular, the paper addressed the results of ICAO’s Seminars on States’ Action Plans held in five ICAO Regions in March and April 2017 and developments related to ICAO’s assistance and capacity-building strategy in relation to the States’ Action Plans initiative and the ICAO-EU and ICAO-UNDP/GEF joint projects. With respect to the ICAO-EU assistance project, it was highlighted that ICAO is currently working with the United Nations Institute for Training and Research (UNITAR) to develop an online training course for the development of State Action Plans on Emissions Reduction, which would be made available at no cost for all national action plan focal points through the UNITAR website dedicated to training courses on climate change (<https://unccelearn.org/>).

5.2.3 Moreover, the paper focused on ICAO's work on CORSIA and efforts to determine Member States' current level of readiness to implement the global MBM scheme. In particular, the paper identified the support and capacity-building activities being provided by ICAO to its Member States on CORSIA. This included reporting on the outcomes of the five regional seminars on CORSIA, held in conjunction with Seminars on States' Action Plans, in March and April 2017, as well as a final Seminar on CORSIA, held in Montréal, Canada in May 2017. In addition, an online CORSIA tutorial was developed to provide guidance to Member States, and State Letter ENV 6/6 – SL 17/79, dated 20 June 2017, was circulated to request States to indicate, by means of a questionnaire, their readiness to implement CORSIA, as well as areas where further assistance was required. CORSIA Standards and Recommended Practices and related guidance material were also being developed by ICAO. The meeting was encouraged to promote the use of regional events as valuable opportunities to connect Member States with one another to establish a regional dialogue on CORSIA and its implementation, and invited States to voluntarily participate in CORSIA from its outset.

5.2.4 The paper also presented an update on the cooperation of ICAO with other UN bodies, namely the UNFCCC. The paper highlighted the need for States to coordinate to ensure that the UNFCCC process remains informed of the progress of the Organization to reduce emissions from international civil aviation, including through the provision of assistance and capacity-building in this regard to its Member States.

**5.3 DP/5/3 TOWARDS IMPLEMENTATION OF THE CARBON OFFSETTING
AND REDUCTION SCHEME FOR INTERNATIONAL AVIATION
(CORSIA) – AUSTRALIA'S EXPERIENCE**

5.3.1 This paper noted the commitments made by 71 Member States, including Australia, representing some 88 per cent of total international aviation activity to join the pilot phase of the CORSIA from 2021. The paper provided a brief overview of Australia's experience to date which may assist other Asia-Pacific States seeking to progress their CORSIA obligations.

5.3.2 The paper invited the Conference to encourage States to consider the steps and challenges in implementing the CORSIA and conduct early engagement with key Government and aviation industry stakeholders.

**5.4 DP/5/4 PLANNING AND CONSTRUCTION OF BEIJING NEW AIRPORT
AS A SPONGE AIRPORT**

5.4.1 The paper noted that Beijing New Airport Project represented a significant landmark construction project in China and a mega international comprehensive aviation hub. In accordance with the concept of building a sponge city, an objective of building a sponge airport was proposed, and special planning and design were carried out for Beijing New Airport project. It aimed to realize a runoff volume control rate of over 85% through varied measures of water infiltration, retention, storage, purification, utilization and drainage, and realized the goals of waterlogging prevention and control, reduction of total runoff volume and pollution, utilization of rainwater resource, protection of water environment, and scientific management of water resources.

5.4.2 The sponge airport construction had been included into CAAC's science and technology development program of the 13th Five-Year Plan. The project aimed to set up an example of sponge airport. It was expected through the conference to improve the planning and construction programs and to achieve more environmental and social benefits with the guidance and support from various partners.

**5.5 DP/5/7 INDONESIA VISIONS ON ICAO SHORT-TERM PRIORITIES:
ALTERNATIVE FUELS AND THE CHALLENGE OF
IMPLEMENTING NEW CORSIA REGULATIONS (SARPS)**

5.5.1 The paper highlighted that Environmental Protection, being one of ICAO's Strategic Objectives, was also becoming a growing social demand in Asia-Pacific region that drives to increasing regulatory and oversight needs to Civil Aviation Authorities in what referred to environmental policy implementation in air transport sector.

5.5.2 The paper presented Indonesia visions on two short-term ICAO priorities in the field of aviation and environmental protection: the celebration of the Second ICAO International Conference on Aviation and Alternative Fuels (CAAF2) in October 2017; and the challenges for a smooth implementation of the ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) related SARPs, currently under development, during year 2018.

5.5.3 With respect to CAAF2 it was discussed that while the use of Sustainable Aviation Alternative Fuels (SAF) was considered an integral component of ICAO's aviation carbon emission reduction goals, its commercial scale-up and availability of supply was still at its very early stages, and CAAF2 it was considered an important short-term milestone to promote SAF and Asia-Pacific States were encouraged to participate, actively contribute to its outcomes and promote regional cooperation in this field.

5.5.4 It was also identified as short-term regulatory challenge the implementation of the new CORSIA related regulations at national level on a timely manner to achieve the initiation of the Monitoring Reporting and Verification (MRV) process from 1 January 2019, and it is considered necessary assistance to States from the ICAO Regional Office on the process of adopting the SARPs requirements on national regulations.

**5.6 DP/5/9 VIEWS AND EFFORTS OF JAPAN ON MONITORING CO2
EMISSIONS FROM AVIATION**

5.6.1 This paper introduced Japan's scheme and efforts with regard to the monitoring and reporting of CO2 emissions from the aviation sector.

5.6.2 The paper noted that Japan had set its aspirational goal of achieving an annual average of 1.5% improvement in fuel efficiency, as described in its State Action Plan, to address CO2 emissions from aviation, and requested Japanese air carriers to report their CO₂ emissions and Revenue Ton-Kilometers (RTKs) in order to recognize the achievement progress of such goal.

5.6.3 The paper also highlighted the importance of Monitoring, Reporting and Verification (MRV) implementation in international aviation in order to start the Global Market-Based Measure, i.e. Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), adopted at the 39th ICAO Assembly.

**5.7 DP/5/11 ENERGY MANAGEMENT AT INDIAN AIRPORTS THROUGH
USE OF SOLAR POWER**

5.7.1 The paper noted that the conventional method of electricity production contributed to massive recurring expenditure for power and large amount of carbon dioxide emission, which created pollution.

5.7.2 The paper also noted that the sustainable development of solar energy for Airport operations referred to the policy and implementation measures. This contributed in reduction of greenhouse gas emission to a large amount.

5.7.3 The paper further noted that aviation growth was a challenge to promote healthy environment nature, which included less usage of electric power and increased use of renewable energy, i.e., solar energy. Solar energy helped Airports to contribute effectively in achieving carbon-neutral growth. It was one of the new ways of Going Green.

5.7.4 The paper highlighted that Airports Authority of India (AAI), the owner of 125 Airports in India, had undertaken certain projects, i.e., creating alternative source of energy by encouraging solar power at airports to meet own energy requirements and fed the surplus energy to the local grid.

5.8 DP/5/12 USE OF SUSTAINABLE ALTERNATIVE FUELS FOR INTERNATIONAL AVIATION

5.8.1 This paper highlighted three key issues relating to the implementation of Sustainable Alternative Fuels (SAF) from the perspective of a State regulator based on Singapore's experience in its Green Package Flights: (i) lack of information and understanding of the regulatory requirements and procedures States had to establish; (ii) objection from stakeholders of the fuel hydrant system for drop-in SAF; and (iii) lack of information over the lifecycle emissions reduction factor of SAF. The paper also urged ICAO to address these issues through the provision of information, development of guidelines for regulatory requirements and procedures, drop-in SAF in existing fuel hydrant system and to determine the life-cycle emissions computations, to encourage the development and deployment of SAF.

5.8.2 In conclusion, the paper invited the Conference to: (i) note some of the considerations taken in the use of SAF in the Green Package Flights; (ii) urge ICAO to include the key elements identified relating to regulatory requirements and procedures, dropped-in fuel certification, and life cycle emissions factor in ICAO's guidelines for SAF; and (iii) encourage States to share their concerns and experiences in the development and deployment of SAF particularly at the ICAO Conference on Aviation and Alternative Fuels in October 2017.

DISCUSSION ON THE PAPERS:

Republic of Korea supported the DP/5/12 — Use of Sustainable Alternative Fuels for International Aviation and encouraged ICAO to provide applicable guidance material.

ICAO Secretariat appreciated DP 5/4 presented by China. The paper highlighted about issues such as: green airport, renewable energy, environmental changes, rainwater management etc. most of what were addressed in Doc 9184 – Airport Planning Manual Part 2 – Land Use and Environmental Control. The update to this manual had been undertaken by the Air Transport Bureau, using experts from Committee on Aviation Environmental Protection (CAEP), and the ICAO Council had approved the updates as of June 2016. The “sponge airport” concept could be included in the manual, in some form.

ICAO Secretariat informed the Conference that the ICAO global climate goals did not include the 2050 emissions reduction goal which was mentioned in paragraph 2.4 of “DP 5/7 – Indonesia Visions on ICAO Short-Term Priorities: Alternative Fuels and the Challenge of Implementing New CORSIA Regulations (SARPs)”.

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AGENDA ITEM 6: TECHNICAL AND REGIONAL COOPERATION

Moderator Air Vice Marshal Ehsanul Gani Choudhury, GUP, ndu, psc
Chairman
Civil Aviation Authority of Bangladesh

6.1 6 Discussion Papers and 12 Information Papers were received under this Agenda Item. Presentation on the topic “Your Project Implementation Partner” from ICAO/TCB and Discussion papers listed below were presented:

REF.	TITLE	PRESENTED BY
DP/6/2	China Civil Aircraft Tracking and Monitoring System	China
DP/6/8	Regional Collaboration to Manage SUAS Operations	Indonesia
DP/6/9	Regional Cooperation toward Aeronautical Information Management	Mongolia
DP/6/11	Air Transport Management Training	France and Hong Kong China
DP/6/17	Implementation of the Asia Pacific Aeronautical Network, CRV	ICAO
DP/6/18	Sustaining Technical Assistance Efforts in APAC through ICAO APAC Combined Action Team (CAT) Programme ICAO	ICAO

6.2 YOUR PROJECT IMPLEMENTATION PARTNER

6.2.1 The presentation highlighted the objectives, role and activities of ICAO’s Technical Cooperation Bureau and the value added for States in availing TCB services. The objectives included capacity building including organizational restructuring, assisting States with experts, training of national experts and procurement of services and goods. The presentation also highlighted three types of programmes: Technical Cooperation Programme, Technical Assistance Programme and ICAO Programme for Aviation Volunteers (IPAV) that ICAO/TCB involved and encouraged States to approach TCB for any services needed.

6.3 DP/6/2 CHINA CIVIL AIRCRAFT TRACKING AND MONITORING SYSTEM

6.3.1 The paper noted that the CAAC attached great importance to global aircraft tracking system by taking active participation in the ICAO activities in such areas as concept of operations, normal aircraft tracking and positioning of aircraft in distress since the accident of Malaysia Airlines Flight MH370 in 2014. The paper also noted that China developed a roadmap for the implementation of “China Civil Aircraft Tracking and Monitoring System”, issued in July 2017.

6.3.2 CAAC encouraged the relevant administrations in the APAC region to take note of this roadmap and share experiences, also looked forward to conducting in-depth cooperation with other civil aviation administrations in the application of Beidou satellite navigation system in civil aviation industry, particularly in the current implementation of monitoring and tracking in general aviation.

**6.4 DP/6/8 REGIONAL COLLABORATION TO MANAGE SUAS
OPERATIONS**

6.4.1 This paper noted the need for efforts by the Asia Pacific countries to provide input into the regulation of SUAS (Small Unmanned Aircraft System) operation already applicable in their respective countries to ICAO through the ICAO UAS Toolkit website, in order to obtain a regulation that could be applied regionally. The paper also emphasized the importance to raise general aviation knowledge for SUAS operator / community to enhance safety awareness

6.4.2 The paper further noted that there were differences in Regulations applied for SUAS operation in every Asia Pacific countries, due to differences in the perception of specifications of weight and type of SUAS. Therefore, it was necessary to give inputs in order to make a regional SUAS regulation by ICAO.

6.4.3 The paper invited Conference to encourage all States to report the applied UAS operating regulation to ICAO (ICAO UAS Toolkit) as guidance to create regulations by other countries and consider by ICAO APAC for making a regional regulation including a requirement to provide general aviation knowledge and technical hazard of SUAS to SUAS operators / communities in an effort to raise safety awareness.

**6.5 DP/6/9 REGIONAL COOPERATION TOWARD AERONAUTICAL
INFORMATION MANAGEMENT**

6.5.1 This paper signified collaboration among States as a successful tool in implementing Aeronautical Information Management (AIM) in order to achieve harmonized, safe, secure and green Asia Pacific Sky.

6.5.2 This paper was in compliance with No Country Left Behind initiative and the following areas of focus as specified in Global Aviation Safety Plan and Global Aviation Safety Roadmap of ICAO:

- GSI – 1 – Consistent Implementation of International Standards and Industry Best Practices;
- GSI – 5 – Consistent Coordination of Regional Programmes; and
- GSI – 9 – Consistent Adoption of Industry Best Practices.

6.5.3 The paper invited the Conference to urge States to ensure that the necessary organizational direction, support and resources are applied to the necessary strengthening States' AIS capability and the transition to AIM; note the need for collaboration among APAC States in terms of AIM implementation; and note the need for collaboration among APAC States in terms of AIM implementation.

6.6 DP/6/11 AIR TRANSPORT MANAGEMENT TRAINING

6.6.1 This paper noted the development of Asian air transport and the recommendations of the ICAO Next Generation of Aviation Professionals initiative and joint decision of Hong Kong International Aviation Academy (HKIAA) and Ecole Nationale de l'Aviation Civile (ENAC) to offer an Advanced Master programme in Air Transport Management, specifically designed to fulfil the needs of the Asian aviation industry.

6.6.2 The paper also noted that French and Hong Kong sides had agreed to offer sponsorship to the Northern Southeast Asian Countries to attend this programme. The paper further noted that the programme was part of the ICAO “No Country Left Behind” Program which intended to provide aviation training to countries looking for capacity building in aviation. It was also a part of the “Belt and Road” initiative to foster closer co-operation among countries along the Belt and Road routes.

6.7 DP/6/17 IMPLEMENTATION OF THE ASIA PACIFIC AERONAUTICAL NETWORK, CRV

6.7.1 The paper noted that in 2013, the Asia-Pacific Region decided to study the most efficient way to implement a cross-border cost-effective telecommunications network for States. The first implementation had started and expected for completion end 2017/early 2018 by Australia, Fiji, New Zealand and the United States.

6.7.2 The paper also noted the steps to take by a State to join CRV as follows: liaison with PCCW Global Ltd, select the desired service from the common package (peers, bandwidth, package), and sign a contract. The contract signed be based on the common package, and any variation, including from the common price schedule should be recorded as such in the order form. The service offered was end to end and the State did not have to contract with a local loop provider (“last mile”).

6.7.3 The paper highlighted a number of challenges, including the meeting of cybersecurity, safety requirements that may be faced by States in implementing CRV and for which guidance was prepared by the CRV Task Force and Operations Group.

6.7.4 The paper also noted that the main threat to CRV implementation may be a fuzzy roadmap, since part of the benefits to join CRV for any given State might be reduced or eliminated by the procrastination of the neighbor peers.

6.7.5 Given the low complexity of technically moving to CRV and the necessity that all decision-makers need a clear target of implementation to perform a realistic cost benefit analysis, the paper invited the Conference to urge APAC States and Administrations to set and monitor a target of implementation for all in 2020.

6.8 DP/6/18 SUSTAINING TECHNICAL ASSISTANCE EFFORTS IN APAC THROUGH ICAO APAC COMBINED ACTION TEAM (CAT) PROGRAMME ICAO

6.8.1 The paper noted that the current average USOAP score for States in RASG-APAC was below the world average of 64.59% and 17 APAC States had lower EIs than the 60% EI of the GASP target. Therefore, there was a continued need to sustain efforts to extend assistance to address the non-satisfactory USOAP protocol questions, which would improve the EIs. APAC States needs assistance to address deficiencies in ANS, AGA and OPS, especially to mitigate the high risk associated with the regions high aviation activities and to keep accident rates down.

6.8.2 The paper also noted that a very successful methodology and assistance concept had been established through the ongoing ICAO APAC CAT missions. Considering the positive results and benefits achieved, there was strong justification for the sustainment of the ICAO APAC CAT Mission programme to reaffirm ICAO’s commitment to continue assistance as part of the NCLB initiative and maintain an outreach to APAC States especially the Pacific Islands.

6.8.3 For the APAC CAT Programme to continue providing ongoing assistance and implementation support to facilitate preparation for future USOAP CMA Activity and increase the EI scores, the paper invited the Conference to urge States/Organizations/Industry to contribute to ICAO's Voluntary Safety Fund (SAFE) earmarked for APAC CAT Programme.

SUMMARY OF DISCUSSIONS:

Your Project Implementation Partner (Presentation)

Bangladesh expressed a sincere gratitude to ICAO/TCB for assistance provided to Bangladesh in various projects and found it very effective. Bangladesh also shared to the Conference about completed and ongoing ICAO/TCB projects mentioned in 'IP 6/21 – ICAO TCB Technical Cooperation to Bangladesh, CAA Inspectors' Staffing Requirements and their Remuneration'.

DP/6/8 — Regional Collaboration to Manage SUAS Operations

India supported the paper and requested ICAO to develop model set of regulations covering UAS and including possible tracking of UAS. ICAO Secretariat informed the Conference that AP/UAS Task Force was constituted under APANPIRG to develop Regional Guidance Materials for regulation and operations of SUAS generally less than 25 Kgs.

DP/6/9 — Regional Cooperation toward Aeronautical Information Management

Hong Kong, China supported the paper and noted that Mongolia and Singapore were comparatively advance in AIM implementation. Hong Kong, China supported Mongolia's initiative of experience sharing to enhance the collaboration of AIM implementation.

CANSO expressed its support for the AIM paper by Mongolia and emphasised that the successful transition from AIS to AIM was an important prerequisite for the new technologies that aircraft and ATM would use to enhance safety and efficiency. Despite being an important building block for the ICAO ASBUs, AIM was not getting the attention it deserved and its implementation was far too slow as noted by Mongolia. CANSO informed the Conference that it was working to raise the profile of AIM and its efforts included the recent publication of an AIM Training Guidance Document and an AIS-AIM Transition Strategy Workshop for its Member ANSPs. The workshop would be held in Singapore in September 2017.

Myanmar congratulated Singapore and Mongolia for successful completion of phase I and phase II of AIM implementation and informed the Conference that Myanmar also completed Phase I and Phase II of AIM implementation.

Bangladesh highly appreciated the paper presented by Mongolia and reiterated three main issues faced in AIS to AIM implementation: lack of human resources, AIM organization structure and support from the management. Bangladesh appreciated Mongolia's initiative to provide technical assistance in the field of AIM.

Singapore appreciated the paper and responded to Hong Kong, China suggestions for Mongolia and Singapore to sharing their experiences in moving towards AIM implementation. Singapore expressed that they would be happy to do so and would work together with Mongolia for this purpose.

The United States echoed others' support of Mongolia's insightful Paper.

DP/6/11 — Air Transport Management Training

Republic of Korea supported the paper and supported the Hong Kong, China initiative in the development of Air Transport and NGAP in the Region. Republic of Korea shared its contribution in capacity building of aviation professionals under NCLB initiative and provided trainings to more than 1700 personnel from 117 States.

DP/6/17 — Implementation of the Asia Pacific Aeronautical Network, CRV

The United States expressed endorsement of ICAO's Paper 6/17. The U.S. along with their South Pacific partners would use the CRV to replace the aging South Pacific Aeronautical Network. This project would transition the legacy point to point communications system to a modern VOIP and data network by early 2018. The U.S. looked forward to sharing lessons learned as the CRV expands and connects the remainder of the CRV partner states.

DP/6/18 — Sustaining Technical Assistance Efforts in APAC through ICAO APAC Combined Action Team (CAT) Programme ICAO

Bangladesh thanked ICAO APAC for two CAT Missions conducted by APAC CAT Team in 2016 and 2017 and benefited from it for the preparation of upcoming ICVM in September 2017 and referred to 'IP 3/16 – Bangladesh's Preparation for the ICAO Validation Mission' which highlighted benefits of CAT Mission and preparation of Bangladesh for ICVM.

Nepal acknowledged and appreciated the paper and expressed its sincere gratitude to TCB, ICAO APAC, ICAO ANB, COSCAP-SA for continuous support to Nepal for its effort in resolving Significant Safety Concern identified by ICAO ICVM in July 2013 and also attain the EI above global average.

Papua New Guinea (PNG) acknowledged the paper and expressed that PNG was a beneficiary of ICAO APAC CAT Mission and it was a successful programme. PNG fully supported the paper and expressed the need to sustain the programme through appropriate funding support. PNG also thanked Singapore, Australia and Regional Office providing subject matter experts for assisting PNG through CAT Missions.

Bhutan supported the paper and congratulated Champion States who provided subject matter experts for APAC CAT Mission and making it a successful programme. Bhutan had EI below 60% and had a CAT Mission in 2016, which had direct effect on country like Bhutan in improving EI. The CAT methodology under NCLB initiative was found very useful and request continuation.

Tonga fully supported the paper and expressed sincere appreciation to ICAO APAC selecting Tonga as one of the participating countries in this initiative. Tonga also appreciated assistance provided by New Zealand, Singapore and Fiji supporting Tonga on ICAO USAP. Tonga expressed that they would like to continue to participate in CAT Mission and looked forward to next APAC CAT Mission in 2018.

ICAO Secretariat thanked all the States who appreciated for CAT Missions and informed the Conference that ICAO APAC Office would try to find resources to continue this initiative in future.

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**AGENDA ITEM 7: SPECIFIC SESSIONS ON AIR NAVIGATION SAFETY &
EFFICIENCY, AVIATION SAFETY AND AVIATION SECURITY
& FACILITATION ISSUES**

Moderator: Dato' Sri Azharuddin Abdul Rahman
Director General
Department of Civil Aviation, Malaysia

7.1 Session on Air Navigation (AN) Safety and Efficiency issues

Issue No. 1: Civil/Military Cooperation: a key enabler for both civil and military entities in the development of a safe and efficient air transport system that effectively serves the nation.

7.1.1 Presentation of the issue

The Secretariat provided a presentation relating to the objectives of civil/military cooperation, issues faced within the Asia/Pacific Region, international policies and the core aspect – 10 elements from the Asia/Pacific Seamless ATM Plan to be considered by each State in implementing optimal civil/military cooperation.

7.1.2 Sharing of lessons learnt by India

India provided a presentation relating to the State's civil/military cooperation advancements and lessons learnt, including the formation of a High Level Airspace Safety Body and the development of a Flexible Use Airspace (FUA) Manual.

7.1.3 Workshop Breakout Session

Facilitators: Mr. Len Wicks, Mr. Raphael Guillet and Dr. Manjit Singh

Participants: Director General and subject matter expert(s) selected by State

7.1.3.1 Delegates were divided into three groups to further discuss the topic in the breakout session. The Secretariat asked the group to discuss civil/military cooperation problems, lessons learnt and possible solutions associated with the 10 elements from the Asia/Pacific Seamless ATM Plan that might be highlighted for regional guidance.

7.1.3.2 Workshop participants considered the following for discussion in the group:

- i) What was the current status of participant's State with regard to each of the 10 applicable civil/military cooperation questions linked to the Asia/Pacific Seamless ATM Plan's civil/military elements?

1. Has your State/Administration implemented:

- a. a high level body managing strategic civil/military policy and planning;*
- b. coordination and communication to manage tactical operations?*

2. *Has your State/Administration implemented rules and procedures for the management of Special Use Airspace (SUA)?*
 3. *Has your State/Administration implemented rules and procedures for Flexible Use Airspace (FUA) operations?*
 4. *Has your State/Administration implemented policies that support common civil and military procedures?*
 5. *Has your State/Administration implemented policies that support common civil and military facilities/systems?*
 6. *Has your State/Administration implemented data sharing interoperability between civil and military systems?*
 7. *Has your State/Administration implemented planning, policies and procedures to manage non-compliant state aircraft and operations (non-compliant with civil requirements)?*
 8. *Has your State/Administration implemented systems and procedures for Search and Rescue (SAR) units, whether civil or military, to ensure expeditious handling and capability?*
 9. *Has your State/Administration implemented policies that ensure CAAs and civil Air Navigation Service Providers (ANSPs) take into account military aircraft requirements, including state aircraft Unmanned Aircraft System (UAS) missions?*
 10. *Has your State/Administration implemented, where applicable, planning and coordination requirements for ballistic launch and space re-entry activities (Seamless ATM Plan)?*
- ii) What legal framework was in place to support civil/military cooperation?
- iii) Did your State have examples of effective civil/military cooperation with regard to the 10 presentation elements that could be briefly shared with other workshop participants?

7.1.3.3 Each State, even those without permanent military forces, took into account the need to implement certain aspects of civil/military cooperation, to effectively operate with other State aircraft operations (such as police and customs) or those aircraft from other States.

7.1.3.4 The Facilitators facilitated the breakout session and reported the outcome of the breakout session to the Plenary Session at the end of the day, which was given in **Appendix A to the Agenda Item 7**. A key deliverable of the Breakout Session for consideration as an Action Item for the 54th DGCA APAC Conference was appended below:

Given the urgent need for greater safety, efficiency and environmental performance in the busiest aviation region, the Conference urged States/Administrations to enhance civil/military cooperation efforts with:

- a) a whole-of government approach that recognises that supporting civil aviation was consistent with the military mission to defend the nation;
- b) an appropriate consultation with airspace users and neighbouring States as required; and
- c) support for civil/military seminars/workshops.

**54th Conference of Directors General of Civil Aviation
Asia and Pacific Regions**

7.2 Session on Aviation Safety issue

Issue No. 2: Runway Safety – Meeting the Challenges of Increasing Runway Excursions

7.2.1 Presentation of the Issue

The International Air Transport Association (IATA)/Flight Safety Foundation (FSF) made a presentation on the topic of **Runway Safety – Meeting the Challenges of Increasing Runway Excursions**.

7.2.2 Sharing of lessons learnt by Singapore

Singapore shared its experience and lessons learnt on the above topic.

7.2.3 Workshop Breakout Session

Facilitators: IATA, FSF, COSCAP-NA CTA Capt. Wayne Chapin, COSCAP-SA CTA Capt. Marie Zubryckyj

Participants: Director General and Runway Safety SME selected by the State

7.2.3.1 Delegates were divided into three groups to further discuss the topic in the breakout session.

7.2.3.2 Background to the topic on Runway Safety

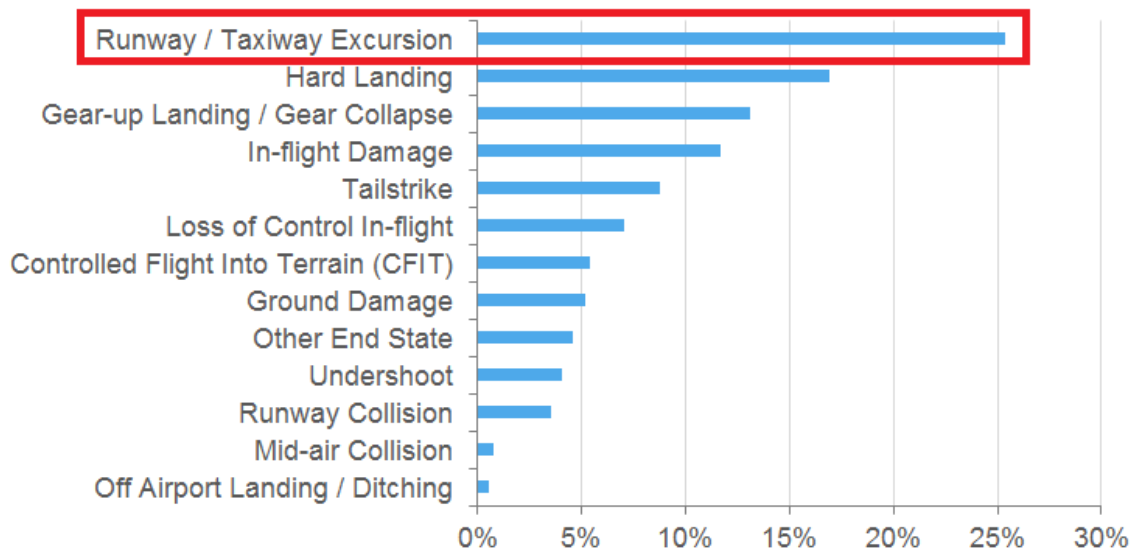
For the past 10 years, runway safety occurrences were the most frequent accident category in the APAC. In the 2016 APAC Annual Safety Report, Runway Safety Category (RS), specifically, Runway Excursion (RE), was identified as one of the top accident categories from 2006 – 2015.

The two following tables provide an idea the number of RS accidents and its proportion (%) when compared with the other accident categories for the APAC Region.

APAC accident categories (RS, LOC-I, CFIT) (2014 - 2016)

	SEA region				SA region				NA region				Pacific region			
Year	RS	LOC-I	CFIT	Total	RS	LOC-I	CFIT	Total	RS	LOC-I	CFIT	Total	RS	LOC-I	CFIT	Total
2014	3	1	0	4	7	0	0	7	2	0	0	2	0	0	0	0
2015	6	0	0	6	1	0	0	1	3	0	0	3	0	0	0	0
2016	5	0	0	5	1	1	0	2	1	0	0	1	0	0	0	0
Total	14	1	0	15	9	1	0	10	6	0	0	6	0	0	0	0

APAC accident category distribution (2012-2016)



7.2.3.3 Workshop participants considered the following for discussion in the group:

- What were the Contributing Factors that contribute to the risk of runway excursion?
- How could runway excursions be managed? (possible Safety Enhancements)
- What were the Risk Management Measures implemented in your State?
- What was the implementation status of Runway Safety Teams in your State?

7.2.3.4 The Facilitators facilitated the breakout session and reported the outcome of the breakout session to the Plenary Session at the end of the day, which was given in **Appendix B to the Agenda Item 7**. A key deliverable of the Breakout Session for consideration as an Action Item for the 54th DGCA APAC Conference was appended below:

Recognizing runway safety occurrences were the most frequent accident category in the APAC and noting that in the 2016 APAC Annual Safety Report, Runway Safety Category (RS), specifically, Runway Excursion (RE), was identified as one of the top accident categories from 2006 – 2016, the Conference urged States/Administrations to:

- establish runway safety programme;
- ensure the establishment and effectiveness of a Runway Safety Team (RST) at every International Airport in the region; and
- report the progress of constitution of RST and its functioning at all their International airports to the 55th DGCA Conference.

7.3 Session on Aviation Security & Facilitation (AVSEC & FAL) issues

Issue No. 3: Resolution of Aviation Security Deficiencies

7.3.1 Presentation of the issue

The Secretariat provided a presentation relating to the status of the ICAO USAP-CMA audit results. The presentation highlighted that CE 8 – Resolution of Security Concerns of States’ Aviation Security Oversight System was almost always the Critical Element with the lowest level of effective implementation as demonstrated through the results of ICAO USAP audits.

7.3.2 Sharing of lessons learnt by Republic of Korea

The Republic of Korea provided a presentation relating to the legal, regulatory and procedural system in place in the State’s aviation security and oversight system particularly as it pertains to the enforcement of compliance with national and international Standards and requirements.

7.3.3 Workshop Breakout Session

Facilitators: Mr. Ross Lockie and Mr. Kyal Barter

Participants: DG and AVSEC and FAL SME selected by the State

7.3.3.1 For advance preparation for the session on Resolution of Aviation Security Deficiencies and discussion in the group States were provided following questions for research:

- i. What was the current legal and regulatory framework in your State with regard to implementation of enforcement actions and mechanisms to ensure compliance with national and international aviation security requirements?;
- ii. When was this framework last revised and does it provide for a sliding scale of appropriate sanctions and penalties for continued non-compliance?; and
- iii. How frequently had any of this framework been implemented? When was the last example of action initiated by the regulatory authority to enforce the implementation of corrective actions to resolve any aviation security deficiencies and/or ensure compliance with national and international aviation security requirements?

7.3.3.2 Delegates were divided into three groups to further discuss the topic in the breakout session.

7.3.3.3 The Secretariat lead a workshop scenario relating to a fictitious State focusing on States’ regulatory and enforcement capability relating to Critical Element 8 of States’ AVSEC Oversight Systems and the Resolution of Deficiencies. The participants in the group were asked to identify any areas of deficiency and possible root causes for lack of resolution of security concerns and identify ways to increase the enforcement capability of a State’s designated appropriate authority for aviation security and overall industry and national level compliance with ICAO Annex 17 – *Security Standards*.

7.3.3.4 At the end of the workshop, participants were requested to report their individual findings and results from the exercise back to the group. Through this exercise, participants identified some of the key points and root causes for a lack of resolution of security concerns as well as identifying lessons learned and best practices from other participants and States, which may then be used to identify and enhance systems in their own States.

7.3.3.5 The Facilitators reported the outcome of the breakout session to the Plenary Session at the end of the day, which was given in **Appendix C to the Agenda Item 7**. A key deliverable of the Breakout Session for consideration as an Action Item for the 54th DGCA APAC Conference was appended below:

Noting that CE 8 – Resolution of Security Concerns of States’ Aviation Security Oversight System is often the Critical Element with the lowest level of effective implementation as demonstrated through the results of ICAO USAP audits, the Conference recommended States/Administrations to:

- a) recognise the importance of comprehensive legislative foundation to ensure effectiveness of the appropriate authority for aviation security and adequate graded enforcement mechanisms to ensure compliance with national policies;
- b) ensure the establishment of the designated national appropriate authority for aviation security with sufficient resources and legal authority to enforce compliance with national requirements and implement enforcement mechanisms as required; and
- c) ensure that aviation security deficiencies identified through quality control activities are actively managed and tracked through the regulatory oversight system through development of software or database to record and monitor quality control activities and deficiencies identified together with corrective action plans.

7.4 Parallel Session: Technological Events for Delegates

Facilitator: Ms. Nancy Graham and Mr. Frederic Lecat, ICAO

7.4.1 Runway Safety Solutions Technological Event

7.4.1.1 Boeing's approach to enhancing runway safety

Speaker: Capt. Robert Aaron, Senior Safety Pilot, The Boeing Company

Capt. Robert Aaron, provided an overview of Boeing's approach to enhancing runway safety through Runway Situational Awareness Tools (RSAT). RSAT represented a suite of tools designed to combat runway excursions, which continue to be a major contributor to commercial aviation accidents. The briefing covered the RSAT technologies being installed on the 737 MAX, as well as retrofit considerations for other Boeing fleets. Capt. Aaron also addressed operational strategies that airlines could adopt to confront the issue and mitigate the threat of runway excursions.

7.4.1.2 Airbus's runway safety philosophy

Speaker: Dr. Logan Jones, Runway Safety Specialist, Airbus – NAVBLUE

The presentation covered Airbus's runway safety philosophy which included in-flight landing distances, Airbus' patented Runway Overrun Prevention System (ROPS) and aircraft as a sensor technology for estimating runway slipperiness. The presentation as a whole elaborated: knowing the right runway condition, performing an in-flight landing distance assessment with the right information, and then ROPS as a safety net.

7.4.2 Aviation Security Solutions Technological Event

7.4.2.1 SMART SECURITY : An IATA and ACI initiative to enhance security, facilitation and operational efficiency

Speaker: Mr. SL Wong, Head - Technical & Industry Affairs, Airports Council International

Smart Security was a joint ACI/IATA initiative aimed at enhancing operational efficiency of the passenger and cabin baggage security checkpoint based on a risk-based screening method, the smart application of screening technology and process reengineering. This presentation focused on the applications of screening technology and process reengineering.

7.4.2.2 ACIs Capacity Building Efforts in Security

Speaker: Mr. SL Wong, Head - Technical & Industry Affairs, Airports Council International

ACI was supportive of ICAO's "No Country Left Behind" initiative. The reason was simple: in a world closely knitted together with a network of international air services, an airport left behind would potentially become the weakest link unravelling the system. The speaker briefly explained a three-pronged approach that ACI adopted to helping its members in improving standards in airport management, especially in the areas of aerodrome safety and aviation security.

7.4.3 ATM Solutions Technological Event

7.4.3.1 Benefits of the ASIA PACIFIC AERONAUTICAL NETWORK, CRV

Speaker: Mr. Frederick Chui, Senior Vice President, Global Data Sales & Pre-Sales, PCCW Global

The presentation provided an overview of CRV which was a turnkey and reliable IP based network for aviation services. It covered benefits for all States to join the CRV project and highlighted the performance, security and safety of the CRV.

7.4.3.2 The Quality Managed Transition of Legacy Aeronautical Information into Database

Speaker: Mr. Erdenebaatar Davaasuren, IFAIMA-APAC Regional Director

The presentation covered Quality Managed Transition of Aeronautical Information from Legacy Aeronautical Information Services to Digital databases of Aeronautical Information and ensuring the quality of legacy aeronautical information. The presentation also highlighted the importance of transition from legacy aeronautical information into database based aeronautical information as a quality managed manner, challenges that APAC States had faced and proposed solutions.

7.4.3.3 Aeronautical Information Management (AIM) solutions and ICAO AIXM Compliance

Speaker: Mr. Norman Nunn – Vice President Avitech GmbH

This presentation provided an overview of Avitech's AIM solution for transitioning to a centralized ICAO required AIXM compliant database of national aeronautical data for use in the automatic publication of the AIRAC cycle AIP, Flight Plan and NOTAM generation and validation, Precision Based Navigation (PBN) solutions and Aeronautical Data Quality.

7.4.3.4 UAS Traffic Management Situation

Speaker: Mr. Andrew Nabarro, ATM Operational Expert, Thales Australia

The presentation covered the topic associated to UTM pertaining to the UAS functional and operational domains for civil authorities. It addressed the associated considerations required to enable UAS operations in different environments and interaction across different stakeholders, concluding with a consideration of a high level UAS/UTM operational roadmap.



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UNITING AVIATION

Appendix A to the Agenda Item 7

Civil/Military Cooperation – a key enabler

Len Wicks

*Regional Officer, Air Traffic Management,
International Civil Aviation Organization (ICAO)*

DGCA Conference, 10 August 2017





Key Outcomes

- A strategic policy-making body is only possible with high level will; this body is an enabler to the other civil/military elements, by building trust and relationships, and establishing policies for change that benefited the nation.
- High level rules-bound process were used to facilitate civil/military cooperation in some nations, but this was not common.





Key Outcomes

- Workshops, seminars, familiarisation visits, and SAR Exercise (SAREX) promote an understanding of different organisations and needs involved.
- Ex-military personnel were perceived to be useful in civil regulators to provide an easier civil/military interface with a common language.
- The military normally had access to civil data, but this depended on interoperability; the key for military data was filtering to ensure security.





Action Item

Given the urgent need for greater safety, efficiency and environmental performance in the busiest aviation region, the DGCA/54 urged States/Administrations to enhance civil/military cooperation efforts with:

- A whole-of government approach that recognises that supporting civil aviation was consistent with the military mission to defend the nation;
- appropriate consultation with airspace users and neighbouring States as required; and
- support for civil/military seminars/workshops.

Note: a civil/military cooperation workshop will be held at the Regional Office from 01-03 November 2017



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(SAM) Office
Lima

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Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



If you've done a gap analysis on which solutions have been implemented and which haven't, we now need to discuss **why** – what the **barriers** are, and how to **overcome** them!

THANK YOU

Runway Safety Meeting the Challenge of Increasing Runway Excursions

Observations

- “Scalability” of RST programmes
- Pilot training, experience and competency
- Right people around the “table”
- Unstabilized approaches and landing long as causal factors
- Data driven approach which includes data sharing
- Regional sharing of experiences – ex. APRAST
- Capacity increase needs to be accompanied by appropriate safety work – safety assessment
- RST lead – airport operator
- Continued drive towards RST at every International Airport in the region



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Appendix C to the Agenda Item 7

Break Out Session Issue No. 3 AVSEC & CE 8 Outcomes

54th DGCA
Ulaanbaatar, Mongolia

Ross Lockie
Regional Officer – AVSEC & FAL
ICAO Asia and Pacific Office





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3.4.7 Each Contracting State shall ensure that the management, setting of priorities and organization of the national civil aviation security quality control programme shall be undertaken independently from the entities and persons responsible for the implementation of the measures taken under the national civil aviation security programme. Each Contracting State shall also:

- a) ensure that the personnel carrying out security audits, tests, surveys and inspections are trained to appropriate standards for these tasks in accordance with the national civil aviation security programme;
- b) ensure that the personnel carrying out security audits, tests, surveys and inspections are afforded the necessary authority to obtain information to carry out these tasks and to enforce corrective actions;
- c) supplement the national civil aviation security quality control programme by establishing a confidential reporting system for analysing security information provided by sources such as passengers, crew and ground personnel; and
- d) establish a process to record and analyse the results of the national civil aviation security quality control programme, to contribute to the effective development and implementation of the national civil aviation security programme, including identifying the causes and patterns of non-compliance and verifying that corrective actions have been implemented and sustained.



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Outcomes of Break out Session No. 3 AVSEC CE 8 Resolution of Security Concerns

- CE 1 - Primary Legislation – Recognised the importance of comprehensive legislative foundation to establish the authority of the appropriate authority for aviation security and adequate graded enforcement mechanisms to ensure compliance with national policies;
- CE 3 - Establishment of the designated national appropriate authority for aviation security with sufficient resources and legal authority and will to enforce compliance with national requirements and implement enforcement mechanisms as required



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Outcomes of Break out Session No. 3 AVSEC CE 8 Resolution of Security Concerns

- CE 8 – Ensure that aviation security deficiencies identified through quality control activities are actively managed and tracked through the regulatory oversight system accountable to Director Generals, to confirm the completion of corrective actions to resolve such deficiencies;
 - Development of software or database to record and monitor quality control activities and deficiencies identified together with corrective action plans



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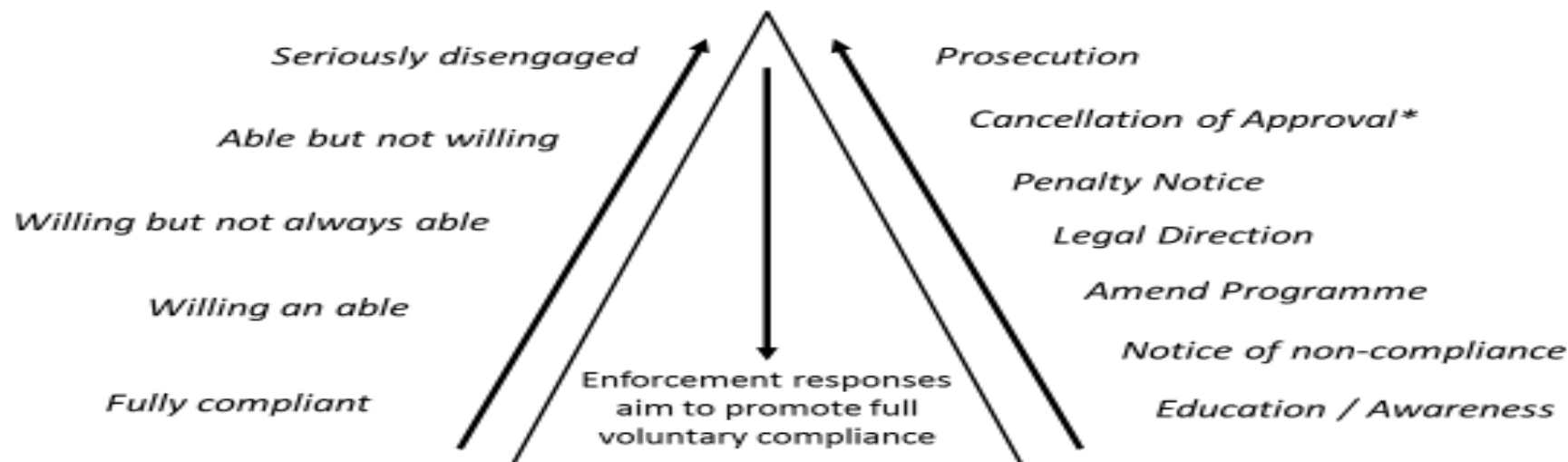


CE 8: Resolution of Security Concerns

ENFORCEMENT

ATTITUDE TO COMPLIANCE

POSSIBLE COMPLIANCE RESPONSES





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Dakar

European and
North Atlantic
(EUR/NAT) Office
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(MID) Office
Cairo

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Southern African
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Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU

**AGENDA ITEM 8: SESSION ON “APAC STATES’ NEEDS - CAPABILITIES
MATCHING PROCESS”**

Facilitator: Mr. Arun Mishra
Regional Director, ICAO APAC Office

8.1 Asia/Pacific Development and Planning Tool (ADAPT)

8.1.1 The ICAO Secretariat presented the ADAPT (Asia/Pacific Development and Planning Tool) concept aiming at gradually bridging the gaps of implementation of SARPs & regional requirements, global objectives (GANP, GASP, GAsEP) and Seamless ATM objectives including Regional priorities.

8.1.2 In the session, it was recognized that whilst initiatives such as the ICAO Combined Action Team programme proved successful, not all implementation gaps were detected, and assistance was not provided to address all detected gaps. Therefore ADAPT would improve the gap detection, deepen the understanding of the root causes behind the gaps and scale up the assistance to the States by mobilizing resources of ICAO and committed partners.

8.1.3 As a result, the agreed way forward was as follows:

- i) States should extensively use available tools in iStars (ANS implementation, USOAP On Line Framework, airport briefing) to identify gaps, understand the causes and request assistance to ICAO; and
- ii) Building on successful assistance initiatives such as the ICAO Combined Action Team Programme, and on emerging solutions such as the iStars Solution Center, ADAPT processes and tool would be gradually developed in to assist with the detection of gaps, root cause analysis, and scale up the assistance while ensuring a better coordination between all ICAO assistance vectors.

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**54th Conference of Directors General of Civil Aviation
Asia and Pacific Regions**

AGENDA ITEM 9: OTHER BUSINESS

Moderator Mr. Vanpheng Chanthaphone
Director General
Department of Civil Aviation, Lao PDR

9.1 6 Discussion Papers were received under this Agenda Item. Discussion papers listed below were presented:

REF.	TITLE	PRESENTED BY
DP/9a/1	Proposal on the Theme for the 55 th Conference of the Directors General of Civil Aviation in Asia and Pacific Regions	Fiji
DP/9b/1	List of Action Items Arising from the 54 th Conference	ICAO
DP/9c/1	Schedule of Meetings/Seminars/Workshops to be Convened in 2018 by the ICAO Asia and Pacific Office	ICAO
DP/9c/2	Schedule of Conferences of DGCAs in the Foreseeable Future	ICAO
DP/9c/3	Asia Pacific Civil Aviation Commission (APCAC) Feasibility Study – Progress Report	Chair APCACTF
DP/9c/4	Draft Declaration of Civil Aviation Ministers' Conference	ICAO

9.2 DP/9a/1 PROPOSAL ON THE THEME FOR THE 55th CONFERENCE OF THE DIRECTORS GENERAL OF CIVIL AVIATION IN ASIA AND PACIFIC REGIONS

9.2.1 The paper noted that the 55th Conference of the Directors General of Civil Aviation of the Asia and Pacific Regions (55th DGCA Conference) would be held in Nadi, Fiji from 22 to 26 October 2018 and proposed that APAC should engage in interactive and stimulating deliberations at the 55th DGCA Conference under the Theme of "Collaboration and Harmonisation for Safe, Secure and Sustainable Aviation in the Asia/Pacific Region".

9.2.2 After detailed deliberations on the Topic, the Conference agreed that the Theme Topic for the 55th DGCA Conference to be held in Nadi, Fiji in 2018 should be **"Collaboration and Harmonisation for Safe, Secure and Sustainable Aviation in the Asia Pacific Region"**

9.3 DP/9b/1 LIST OF ACTION ITEMS ARISING FROM THE 54th DGCA CONFERENCE

9.3.1 The ICAO Secretariat presented a List of Action Items arising from the deliberation during the Conference. The Conference reviewed each Agenda Item and, after some discussions endorsed 27 Action Items. The List of Action Items provided at **Appendix A** to this Report.

**9.4 DP/9c/1 SCHEDULE OF MEETINGS/SEMINARS/WORKSHOPS TO BE
CONVENED IN 2018 BY THE ICAO ASIA AND PACIFIC OFFICE**

9.4.1 The ICAO Secretariat presented a tentative schedule of Meetings, Seminars and Workshops planned to be convened in 2018 by the ICAO Regional Office for the Asia and Pacific Regions. The information was presented to States and International Organizations for advance planning/budgetary purposes only and may be subject to change. A formal letter of invitation would normally be issued at least 2 months prior to each event. Other special co-ordination and Task Force/Working Group Meetings would also be convened during the year 2018, as necessary.

**9.5 DP/9c/2 SCHEDULE OF CONFERENCES OF DGCA^s IN THE
FORESEEABLE FUTURE**

9.5.1 The Conference noted that CAA Fiji would be the host for the 55th DGCA Conference scheduled from 22 to 26 October 2018.

DISCUSSIONS:

Nepal offered to host the 56th DGCA Conference in Kathmandu, Nepal in 2019.

Bangladesh offered to host the 57th DGCA Conference in Dhaka, Bangladesh in 2020.

Singapore expressed usefulness of ICAO HQ, Secretariat, Council Members and Air Navigation Commissioners to attend future Asia/Pacific DGCA Conferences. It better helps them understand issues and concerns in this Region and informed decision making in Montreal in a way that better meets the needs of this Region. Singapore invited the Conference to urge ICAO Representatives from Asia/Pacific Region, Air Navigation Commissioners, ICAO HQ and Secretariat to attend future DGCA Conferences.

India supported a proposal put forward by Singapore.

**9.6 DP/9c/3 ASIA PACIFIC CIVIL AVIATION COMMISSION (APCAC)
FEASIBILITY STUDY – PROGRESS REPORT**

9.6.1 The paper outlined the progress of the APCAC Task Force undertaking a feasibility study into the potential establishment of a Civil Aviation Commission for the Asia Pacific Region.

9.6.2 The paper noted that there had been much progress made in the Tasks undertaken in Phase 1 of the work of APCACTF Expert Group, with significant information and insights gained, thanks to the valuable contribution of States and regional working groups in the region. The paper also noted that the work on the feasibility study had revealed that there was a continuing need to find improved means of coordination and support for many States in the Asia and Pacific Regions to build their capabilities to improve safety and air navigation. In particular, there was agreement that the region's top two key priorities were: i) assistance to build their capabilities to improve safety and security (including implementation of USOAP and USAP corrective action plans); and ii) additional capacity building to develop the next generation of aviation professionals and address emerging regional and global challenges.

9.6.3 The paper also noted that the majority of members of the Task Force were of the view that presently there was insufficient basis to establish an Asia Pacific Civil Aviation Commission (APCAC). The Task Force noted the challenges in the region reported by States and

that there were various regional cooperation and collaboration mechanisms to address these challenges. The majority of Task Force members felt that there was scope to enhance and strengthen these mechanisms, to improve their effectiveness and thus achieve the region's priorities in an expeditious manner. The Task Force also noted the shortage of resources to continue the feasibility study whilst bearing in mind the need to continue working on building and enhancing existing regional capacity and capability building mechanisms, including the provision of technical assistance.

9.6.4 The paper further noted that the Task Force agreed on the need to focus on a coordinated regional approach towards capability and capacity building, and technical assistance bearing the regional priorities in mind. The effort should be on strengthening and evolving existing platforms and mechanisms for regional cooperation, so as to provide more effective support for the region. This would help to optimize regional resources, and avoid needless duplication of effort.

9.6.5 The paper invited the Conference to agree to conclude the APCAC feasibility study and establish a new Taskforce to focus exclusively on strengthening and evolving existing regional mechanism for regional cooperation, towards capability and capacity building and technical assistance; and encourage States/Administrations to participate in the new Taskforce.

DISCUSSIONS:

Singapore thanked members of the Task Force for excellent work completed under this study, appreciated and thanked Dato' Sri Azharuddin Abdul Rahman for his leadership in entire process of the study. Singapore supported conclusion of the Task Force and expressed to volunteer as part of the new Task Force.

China also thanked members of the Task Force for its efforts for the study over two years and appreciated the Chair for his excellent leadership.

New Zealand expressed its appreciation for the outstanding work done by the Task Force and supported the conclusion of the Task Force. New Zealand expressed an interest to join as membership of the new Task Force and committed to regional capacity/capability building meeting.

Australia also supported the recommendations of the Task Force and expressed an interest in the membership of the new Task Force.

9.7 DP/9c/4 DRAFT DECLARATION OF CIVIL AVIATION MINISTERS' CONFERENCE

9.7.1 The ICAO Secretariat presented the "Draft Declaration of Civil Aviation Ministers' Conference" which was prepared by the working group incorporating the comments received from the member States. The "Draft Declaration of Civil Aviation Ministers' Conference" attached in **Appendix A to the Agenda Item 9** was supported by the Conference which would be presented in Ministerial Conference.

DISCUSSIONS:

China offered to host the Ministerial Conference in Beijing, China from 31 January to 1 February 2018 and requested all States to block these dates for the Ministerial Conference. China also informed that after the formal approval from the State Government and in coordination with ICAO, a formal invitation letter would be sent out to the States.

**9.8 SUGGESTION FOR IMPROVEMENT AND FEEDBACK ON NEW DGCA
CONFERENCE FORMAT**

Sri Lanka thanked Mr. Arun Mishra, Regional Director for having taken a bold initiative to change the DGCA Conference format and his team for making to happen very successful. Sri Lanka also suggested that the topics to be discussed during breakout sessions be pre-identified in consultation with DGCAs would be more useful. Time allocation for the breakout session should be enough for fruitful discussion.

Malaysia appreciated and welcomed the plenary and breakout sessions in this DGCA Conference. Malaysia supported the view of Sri Lanka to allocate more time for the breakout session. Malaysia emphasized on importance of relevant subject matter expert's participation in breakout session with a particular topic for meaningful discussion. Malaysia suggested to have more open discussion on current issues, especially in aviation security matters, as DGCA Conference is the forum where most of the Directors General get together and provide an opportunity to discuss how to meet current threats together. Malaysia also suggested to provide more time to Facilitators to prepare report of the breakout sessions.

China appreciated ICAO APAC Office and the Regional Director introducing breakout sessions in the DGCA Conference to communicate and exchange views, sharing experiences in crucial issues regarding civil aviation, safe, secure, efficient and sustainable development of the region. China welcomed this change in the DGCA Conference format.

The United States provided the feedback on Conference Sessions. The U.S. expressed that the time management was well handled by the moderators during the sessions. The U.S. also noted that the length and the structure of the meeting provided them a plenty of opportunities to meet with their partners to share experiences in their areas and in areas, such as managing growing demands and new entrance in the aviation system. The U.S. congratulated ICAO APAC Office for leadership in changing the model of the meeting to allow for more free flowing discussions amongst Directors General in breakout sessions. The U.S. expressed that they would like to see the similar approach in substantive policy issues, which would include more voices in dialogue.

Singapore also congratulated ICAO APAC Office introducing new format of the DGCA Conference and expressed happiness for amount of works done within 5 days of the DGCA Conference. Singapore provided following comments to improve the sessions on:

- Participation in the future DGCA Conferences by ICAO Representatives from Asia/Pacific Region, Air Navigation Commissioners, ICAO HQ and Secretariat; and
- Choices of topics and time needed to spend for discussion during breakout sessions as proposed by Sri Lanka and Malaysia.

Australia made three comments on Conference Sessions. Firstly, for the delivery of discussion papers the timeframe should be limited to 2 – 3 minutes. Secondly, in terms of panel discussion, Australia encouraged ICAO, having panel discussion to try some of the new technology, which allows questions to come up from the floor in real time and have the panel answers those questions and manages within topic those questions. Thirdly, Australia supported Sri Lanka, Malaysia and Singapore proposal to lengthen the time for discussion during breakout session, at least for 90 minutes instead of 60 minutes provided in this Conference.

DRAFT

Declaration of Civil Aviation Ministers' Conference

- 1) We, the Ministers from the Asia and Pacific States, responsible for Civil Aviation, met in *[City, Country]* from *[DD to DD MM YY]*, on the occasion of the Conference on Aviation Safety and Air Navigation in the Asia and Pacific Region organized by the International Civil Aviation Organization (ICAO);
- 2) Mindful of the obligations as Contracting States to the Convention on International Civil Aviation signed on 7th December 1944 (also known as the Chicago Convention);
- 3) Considering the importance of air transportation world-wide for social and economic development (the Global Air Transport Industry supports almost 62.7 million jobs worldwide and contributes US\$ 2.7 trillion to Global Gross Domestic Product (GDP), equivalent to 3.5% of global GDP and US\$ 664.4 billion aviation direct economic impact)¹;
- 4) Recognising that the Asia and Pacific Region has become the world's largest aviation market in terms of available seat-kilometres and generates the world's second largest share of international revenue passenger-kilometres, and will continue to grow with corresponding air traffic capacity, efficiency and safety challenges;
- 5) Recognising that there are various programmes, objectives and targets currently being pursued under the ICAO "No Country Left Behind (NCLB)" initiative to assist States in capacity development in order for States to derive maximum social economic benefits from aviation;
- 6) Recognising that the ICAO Global Air Navigation Plan (GANP) and the Global Aviation Safety Plan (GASP) set out regional expectations, priorities and targets for States, agreed at regional fora such as the Asia Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) and the Regional Aviation Safety Group (RASG-APAC);
- 7) Recognising that there are existing bilateral and multi-lateral working relationships and platforms, such as the Asia and Pacific Directors General of Civil Aviation (APAC DGCA) Conference, APANPIRG, RASG-APAC; and ICAO-led initiatives (e.g. Aviation Safety Implementation Assistance Partnership (ASIAP), the Combined Action Teams (CAT));
- 8) Recognising the importance of active participation of States through their experts attending ICAO fora and other international meetings, training, seminar and workshop events to advance civil aviation development in the Region;

- 9) Acknowledging that the existing regional relationships and partnerships are evolving with meaningful technical cooperation and assistance programmes (e.g. Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs), Flight Procedure Programme (FPP));
- 10) Mindful of the importance and impact of aviation safety and efficient air navigation services on the sustainable development of air transport;
- 11) Recognising that the ICAO Universal Safety Oversight Audit Programme (USOAP) has been effective in helping States focus on safety oversight capabilities and to address gaps in implementation of ICAO Standards and Recommended Practices (SARPs) and regulatory safety oversight;
- 12) Considering the Asia and Pacific Region is diverse (e.g. in terms of capacity and civil aviation development with USOAP Effective Implementation (EI) scores ranging from 5% to over 90%), there is a compelling need for stronger regional cooperation, partnerships and engagement to continuously improve aviation safety;
- 13) Recognising the ICAO “Next Generation of Aviation Professionals (NGAP)” initiative aimed at addressing the need for aviation professionals in various fields and the importance of having adequate qualified and competent aviation professionals to meet the challenges of the significant aviation growth experienced by the Region;
- 14) Considering the need to support the timely implementation of the Asia/Pacific Seamless Air Traffic Management (ATM) Plan and its elements to enhance safety and efficiency of air navigation services to cater for the projected air traffic growth in the Region;
- 15) The Ministerial Conference agrees to the xxx Declaration and the Ministers commit to the following:

1.0 Aviation Safety

1.1 Commit to:

- (a) Implement an effective State Safety Programme (SSP) by 2022;
- (b) Progressively enhance safety oversight capability to achieve a USOAP EI score higher or equal to the global average by 2022;

- (c) 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;
- (d) Certify all aerodromes used for international operations by 2020.; and
- (e) Implement programmes relating to the three global safety priorities; runway safety, loss of control in flight and controlled flight into terrain, to reduce accident rates and fatalities in the region below the global average.

1.2 Promote sharing of best practices in safety management through regional cooperation and partnerships.

2.0 Air Navigation Services

2.1 Commit to timely implementation of the Asia/Pacific Seamless Air Traffic Management

(ATM) Plan to enhance ATM capacity and harmonization in the region, including a focus on:

- (a) Transitioning from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System;
- (b) Performance Based Navigation (PBN) implementation;
- (c) Common ground/ground telecommunication infrastructure to support Air Navigation Services (ANS) applications;
- (d) An enhanced level of civil/military cooperation;
- (e) Enhanced surveillance capability including Automatic Dependent Surveillance- Broadcast (ADS-B) technology; and
- (f) Air Traffic Flow Management/Collaborative Decision Making (CDM) implementation for high density airports.

2.2 Promote sharing of best practices in the provision of ANS including Aeronautical Search and Rescue (SAR), Meteorological Services for International Air Navigation (MET) and Air Traffic Flow Management (ATFM) through regional cooperation and enhanced coordination.

3.0 Accident Investigation

3.1 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. .

4.0 Human Resource Development

4.1 In line with the ICAO initiative on “Next Generation of Aviation Professionals (NGAP)”, accord priority to human capital development to provide sufficient qualified and competent aviation professionals to support the Region’s growing needs, including where appropriate:

- (a) Establish access to quality training; and
- (b) Encourage sharing of resources bilaterally and/or multilaterally as well as with industry partners;

4.2 Promote the attraction of new talent and the retention of trained, qualified and experienced personnel among State Aviation Organizations (e.g. regulators, air navigation service providers).

¹ Aviation Benefits beyond Borders, Air Transport Action Group, July 2016

² ICAO Air Transport Yearly Monitor 2015

³ ICAO Air Navigation Report 2015

10. OTHER ACTIVITIES OF THE CONFERENCE

10.1 PANEL DISCUSSION

Topic: Asia Pacific at the cross roads: Breaking Barriers and Navigating the Future

Panelists

- ❖ Dr. Olumuyiwa Benard Aliu, President of the ICAO Council
- ❖ Mr. Michael P. Huerta, Administrator of Federal Aviation Administration
- ❖ Mr. Bambang Susantono, Vice President (Knowledge Management and Sustainable Development), Asian Development Bank
- ❖ Ms. Angela Gittens, Director General, Airports Council International (ACI) World
- ❖ Ms. Aireen Omar, CEO Air Asia

Moderator: Dr. Fang Liu, ICAO Secretary General

10.1.1 Dr. Fang Liu welcomed all panelists and made introductory remarks on the topic of the panel discussion followed by the introduction of the panelists. Then, Dr. Fang Liu requested the panelists to provide their own perspectives of the global outlook, challenges and opportunities for the Asia Pacific Region from their unique areas of responsibility, experience and perspective.

10.1.2 Following the individual remarks by the panelists, Dr. Fang Liu posed one question in turn to each panelist on issues affecting Asia Pacific aviation and then opened the floor for questions to and answers by the panelists.

10.1.3 At the end of the panel discussion, each panelist was invited to give ONE one-liner advice to the Directors General of CAAs from Asia/Pacific Region.

10.1.4 Dr. Fang Liu thanked all panelists and Directors General for active participation in the discussion.

10.2 KEY OUTCOMES OF ICAO MEETINGS (APANPIRG/27, RASG-APAC/7 & RASCF/5)

10.2.1 Mr. Graeme Harris, Chairman of APANPIRG presented key outcomes of APANPIRG/27 Meeting held in Bangkok, Thailand from 7 to 10 September 2016.

10.2.2 Mr. H. M. C. Nimalsiri, Chairman of Regional Aviation Safety Group-Asia/Pacific (RASG-APAC) presented key outcomes of RASG-APAC/7 Meeting held in Bangkok, Thailand from 3 to 5 July 2017.

10.2.3 On behalf of Mr. Douglas Yeo, Chairman of Regional AVSEC Coordination Forum – Asia/Pacific (RASCF-APAC), Mr. Ross Lockie, Regional Officer, AVSEC & FAL presented key outcomes of RASCF-APAC/5 Meeting held in Bangkok, Thailand on 6 to 7 July 2017.

**10.3 SPECIAL SESSION: PBN FOR EXECUTIVES AND SHARING OF LESSON
LEARNT BY THAILAND**

PBN for Executives

10.3.1 Following the action 53/8 taken at the 53rd DGCA Conference in Sri Lanka, the ICAO Secretariat gave an overview presentation on PBN. The goal of this presentation was to educate decision makers and executives on PBN strategy and implementation so that they could take the appropriate measures (human resource, finance, organization) to ensure a faster implementation of PBN in the APAC Region.

10.3.2 The PBN implementation in the APAC Region was late with respect to the target date of the Assembly Resolution A37-11. Some APAC States had not yet provided their PBN implementation plan to ICAO and only 57 % of instrument runway ends of APAC international airports had PBN approaches.

10.3.3 The ICAO Secretariat advised the APAC States to nominate a national PBN focal point that will coordinate PBN strategy with airspace users, airports, regulators and ANSP. Operational approval and oversight of procedure design were also identified as challenges for the region. The APAC States were invited to consolidate their PBN regulatory framework.

10.3.4 ICAO Secretariat informed that ICAO could assist States in their PBN implementation through various ways: regional working group (PBNICG), regional programmes (FPP and COSCAP) and also the PBN Go Teams.

Sharing of Lesson Learnt by Thailand on PBN Implementation

10.3.5 Thailand shared its experience and lessons learnt on PBN implementation in Thailand.

LIST OF ACTION ITEMS ARISING FROM THE 54th CONFERENCE

Discussion Paper No.	Action Item	Description
Agenda Item 1 - Theme Topic		
DP/1/1, DP/1/4, DP/1/7 & DP/1/8	Action Item 54/1	<p>The Challenge of Managing Outcome Focused and Risk Based Regulations for Asia Pacific States.</p> <p>Recognizing the need to adopt performance-based regulation and a risk-based approach in safety management to better address the safety challenges in the APAC Region, and the instrumental role ICAO plays in supporting States to effectively implement this approach, the Conference:</p> <ul style="list-style-type: none"> a) Recommended ICAO to organise a regional workshop to promote the sharing of knowledge and best practices among States, so as to support implementation of Performance-based Regulations (PBR) to further enhance safety; b) Requested ICAO where appropriate to develop guidance material and tools to support a risk-based approach in safety management; c) Encouraged States/Administrations to put more resources and efforts to achieve the objectives outlined in the GASP, in particular the implementation of a State Safety Programme (SSP) and Safety Management System (SMS); d) Encouraged ICAO to prioritise the adoption of performance-based SARPs, where appropriate, such as in Annex 14; e) Encouraged ICAO to adopt a differentiated Effective Implementation (EI) target commensurate with States' level and complexity of aviation activities in the GASP 2020-2022; and f) Encouraged States/Administrations, as appropriate, to implement performance-based regulation to further enhance safety.

Agenda Item 3: Aviation Safety and Air Navigation		
DP/3/2	Action Item 54/2	<p>Quality and Timeliness of Aeronautical Information</p> <p>Noting the ongoing issues of poor quality and timeliness of aeronautical information published in the AIP and AIP Supplements, the Conference urged States/Administrations to:</p> <ul style="list-style-type: none"> a) implement the necessary legislative, regulatory, organizational and resource support for the critical safety and efficiency requirement for quality management and timeliness of aeronautical information; b) take stronger actions on the APANPIRG Conclusions relating to Aeronautical Information Services, as agreed by State representatives at APANPIRG meetings; and c) review their AIM transition plan and ensure that they have fully implemented AIRAC and quality management-related AIM transition steps.
DP/3/5	Action Item 54/3	<p>Proposed Global Strategy and Action Plan for the Improvement of Regional Safety Oversight Organizations (RSOOS) and the Establishment of a Global System for the Provision of Safety Oversight</p> <p>Noting that insufficient safety oversight resources to meet the projected growth in aviation is a common problem for States/Administrations, the ICAO presented their proposed global strategy and action plan for the improvement of RSOOs and the establishment of a global system for the provision of safety oversight, the Conference urged States/Administrations to support the proposed global strategy to improve and strengthen existing RSOOs; and, States endorse the objectives for a global system for the provision of safety oversight, and are encouraged to participate in the study of a proposed Global Aviation Safety Oversight System (GASOS).</p>
DP/3/7	Action Item 54/4	<p>Automation Interface between Flight Information Regions</p> <p>Noting a number of impediments to the safety and efficiency of flights crossing of Flight Information Region (FIR) boundaries and that AIDC has been identified as one of the top ten priorities in the ICAO APAC Seamless ATM Plan, the Conference encouraged States/Administrations to expedite the implementation of AIDC between neighbouring FIRs and in doing so, may also take into consideration the information available in the CANSO publication on “<i>Automation Interface Between Flight Information Regions: Best Practice Guide for ANSPs</i>”.</p>

DP/3/8	Action Item 54/5	<p>Managing Interference to Global Navigation Satellite System (GNSS)</p> <p>Recognizing the continued growing importance of GNSS to current and advanced aviation applications and the safety of flight, and the impact of GNSS interference on the safety and efficiency of aircraft operations the Conference urged States/Administrations to:</p> <ul style="list-style-type: none"> a) work proactively with their National Telecommunications Authorities to ensure robust detection, management and mitigation processes are in place to address GNSS interference; and b) ensure that ICAO guidance material is made available and well understood by relevant stakeholders.
DP/3/9	Action Item 54/6	<p>Initiatives to Promote Safe and Efficient Ground Handling Operations</p> <p>Acknowledging IATA's efforts in developing industry standards and systems to promote and enhance the safety and efficiency of ground handling operations, the Conference requested States/Administrations and industry to take into account the recent work by ICAO on developing relevant guidance as well as IATA safety audits, or relevant industry standards and guidance.</p>
DP/3/11	Action Item 54/7	<p>Implementation of Performance Based Communication and Surveillance (PBCS) in Asia Pacific</p> <p>Noting the applicability date of ICAO SARPs and procedures for PBCS regional implementation date of not later than 29 March 2018, the Conference urged States/Administrations to:</p> <ul style="list-style-type: none"> a) Respond to the ICAO APAC survey on PBCS (if they have not already done so); and b) Ensure they have an operational approval process for aircraft on their registry that will operate in PBCS airspace areas.
DP/3/12	Action Item 54/8	<p>Civil Aviation Regulatory Framework and Performance Based Regulations in Air Navigation</p> <p>Noting the need for a standardized approach to the performance based safety oversight of the air navigation service providers in the APAC Region through the development of an ANS Safety Oversight Manual, the Conference:</p> <ul style="list-style-type: none"> a) recommended that the RASG APAC to consider developing guidance material for an ANS oversight; and b) encouraged the APAC States/Administrations to participate in the development of the guidance material.

DP/3/24 & DP/3/44	Action Item 54/9	<p>Safety Oversight and Management of Unmanned aircraft operations</p> <p>Noting the rapid changes in the Unmanned Aircraft System (UAS) industry as well as the need to meet the development of UAS and to coordinate safety oversight / management strategies and practices amongst States/Administrations, the Conference requested States/Administrations to:</p> <ul style="list-style-type: none"> a) Actively participate in the ICAO Asia/Pacific Unmanned Aircraft Systems Task Force; and b) Participate in Remotely Piloted Aircraft Systems (RPAS) and Drone Enable Symposiums to be organized by ICAO in September 2017.
DP/3/23	Action Item 54/10	<p>Recognizing the progress made by several States/Administrations in implementing cross border ATFM using the Distributed Multi-Nodal ATFM Network concept along with recent operational trials to regulate air traffic flow to balance demand and capacity and harmonized approach to implement cross-border ATFM in the region is in line with the vision of the Asia Pacific Seamless ATM Plan, the Conference encouraged States/Administrations:</p> <ul style="list-style-type: none"> a) to participate in the Distributed Multi-Nodal ATFM Network project and commit the necessary resources to support cross-border ATFM operations; b) to participate actively in the ICAO Asia Pacific ATFM Steering Group with a view to contribute towards the harmonization of ATFM information exchange requirements and interface control document to support ATFM system-to-system communication; and c) developing ATFM implementation plans, to harmonize the processes in line with the ICAO Asia Pacific Regional Framework for Collaborative ATFM.
DP/3/25 & DP/3/37	Action Item 54/11	<p>Safety Management Measures</p> <p>Noting the ongoing effort of States in respect of the implementation and effective oversight of Safety Management System (SMS), including the development of Safety Oversight Toolkit, the Conference requested:</p> <ul style="list-style-type: none"> a) ICAO to organize training sessions and experience exchanges, and learn from the practical experiences and best practices adopted by other States/Administrations; and b) States to share experience and lessons in safety performance management, to enable ICAO to update the Safety Management website with the relevant information.

DP/3/42	Action Item 54/12	<p>Harmonization of Airport Collaborative Decision Making (A-CDM) Practices</p> <p>Noting the experience of States/Administrations gained from the implementation of A-CDM and recognizing a collaborative approach in the implementation of A-CDM would lead to the optimization of airport operations which contributes towards achieving seamless ATM in the APAC Region, the Conference encouraged States/ Administrations to:</p> <ul style="list-style-type: none"> a) work towards harmonization of A-CDM practices in APAC Region and to participate in the ICAO Asia/Pacific A-CDM/TF; and b) implement A-CDM taking into account the cross-border ATFM operations.
DP/3/49	Action Item 54/13	<p>Paving way for Interoperability of Air Traffic Management System (ATMS)</p> <p>Noting the need for a risk-based approach throughout system development, testing/acceptance, system and operations transition, handling of teething issues of its safety-critical ATMS with good lessons learned, the Conference supported the initiative of States towards formation of an international Users' Group for ATMS to share operational and technical experience, and map out the future system development roadmap, which could be beneficial for the APAC Region in respect of development of the global roadmap and performance-based requirements of the ATMS.</p>
Agenda Item 4: Economic Development of Air Transport		
DP/4/1	Action Item 54/14	<p>ICAO's work for Economic Development of Air Transport</p> <p>The Conference acknowledged ICAO's work for economic development of air transport and encouraged States/ Administrations to:</p> <ul style="list-style-type: none"> a) Apply and follow ICAO's policies and guidance in the air transport field in their regulatory practices, including the long-term vision for liberalization and core principles on consumer protection; b) Coordinate with ICAO in meeting States' needs of data, analysis and tools to promote air transport development in the region; and c) Contribute to the voluntary Air Transport Fund.
DP/4/7	Action Item 54/15	<p>Economic Benefits of Code-share, Co-Terminal and own –stopover rights.</p> <p>Recognising the benefits of liberalising third party code-share, domestic code-share, co-terminal and own-stopover rights to all aviation stakeholders and to the States' economies, the Conference encouraged States to liberalise these rights as part of the wider liberalisation of market access.</p>

Agenda Item 5: Aviation and Environment		
DP/5/1	Action Item 54/16	<p>International Civil Aviation and Environment</p> <p>Acknowledging the recent developments within ICAO in the field of aviation and the environment, including the results of the 39th Session of the ICAO Assembly held from 27 September to 6 October 2016, the Conference encouraged States/Administrations to:</p> <ul style="list-style-type: none"> a) develop, update and submit their action plans as soon as possible; b) promote the use of regional events as valuable opportunities to connect Member States in order to establish a regional dialogue on CORSIA and its implementation, as well as encourage States to voluntarily participate in CORSIA from its outset; and c) continue to inform the UNFCCC process of the work being undertaken by ICAO to address emissions from international civil aviation.
DP/5/3, DP/5/7 & DP/5/9	Action Item 54/17	<p>Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)</p> <p>Recognizing the importance of Monitoring, Reporting and Verification (MRV) of CO₂ emissions from international aviation in order to ensure the steady implementation of CORSIA in line with the timeline as adopted at the 39th ICAO Assembly, the Conference encouraged States/Administrations to:</p> <ul style="list-style-type: none"> a) consider the steps and challenges in implementing the CORSIA; and b) conduct early engagement with key Government and aviation industry stakeholders.
DP/5/12	Action Item 54/18	<p>Use of Sustainable Alternative Fuels for International Aviation</p> <p>Noting some of the considerations taken in the use of Sustainable Alternative Fuels for Aviation (SAF) in the CAAS-SIA [Civil Aviation Authority of Singapore (CAAS), in partnership with Singapore Airlines (SIA)] Green Package Flights, the Conference:</p> <ul style="list-style-type: none"> a) Urged ICAO to consider including the key elements identified relating to regulatory requirements and procedures, dropped-in fuel certification, and life cycle emissions factor in ICAO's guidelines for SAF; and b) Encouraged States/Administrations to share their concerns and experiences in the development and deployment of SAF particularly at the ICAO Conference on Aviation and Alternative Fuels in October 2017.

Agenda Item 6: Technical and Regional Cooperation		
DP/6/9	Action Item 54/19	<p>Recognising the collaboration among States as a successful tool in implementing Aeronautical Information Management (AIM) in order to achieve harmonized, safe, secure and green Asia Pacific Sky, the Conference:</p> <ul style="list-style-type: none"> a) Urged States to ensure that the necessary organizational direction, support and resources are applied to the necessary strengthening States' AIS capability and the transition to AIM; and b) Noted the need for collaboration among APAC States in terms of AIM implementation.
DP/6/17	Action Item 54/20	<p>Noting that the CRV, a cross-border cost-effective telecommunications network for APAC States, enables the Global Air Navigation Plan and Seamless ATM objectives and would mitigate a number of current deficiencies in ANS communications, the Conference urged APAC States/Administrations to:</p> <ul style="list-style-type: none"> a) Note that common arrangements on cybersecurity and safety issues have been taken that will help ICAO Member States to meet their obligations while implementing CRV; and b) Set and monitor 2020 as the target for CRV implementation for all ASNP, to optimize each individual cost benefit analysis, and note that failing this, pessimistic assumptions might threaten the roll-out of CRV initiative.
DP/6/18	Action Item 54/21	<p>Recognising a very successful methodology and assistance concept through the ongoing ICAO APAC CAT missions, there is a strong justification for the sustainment of the ICAO APAC CAT Mission programme to continue assistance to APAC States as part of the NCLB initiative, the Conference:</p> <ul style="list-style-type: none"> a) Urged States to write directly to the ICAO APAC Regional Office to provide in-kind contributions by releasing SMEs for future planned CAT missions; b) Encouraged States who have received APAC CAT Mission assistance to consistently work on the guidance provided and implementation of the recommendations contained in the comprehensive mission reports and report the progress to the APAC Regional Office; c) Urged States, Organizations and Industry to make voluntary contributions to the ICAO SAFE Fund earmarked for the ICAO APAC Combined Action Team (CAT) programme to support its continued assistance activities to States; and d) Urged ICAO to continue APAC CAT assistance missions through 2019.

Agenda Item 7.1: Session on Air Navigation (AN) Safety and Efficiency issues		
	Action Item 54/22	<p>Issue No. 1: Civil/Military Cooperation: a key enabler for both civil and military entities in the development of a safe and efficient air transport system that effectively serves the nation</p> <p>Given the urgent need for greater safety, efficiency and environmental performance in the busiest aviation region, the Conference urged States/Administrations to enhance civil/military cooperation efforts with:</p> <ul style="list-style-type: none"> a) a whole-of government approach that recognises that supporting civil aviation was consistent with the military mission to defend the nation; b) an appropriate consultation with airspace users and neighbouring States as required; and c) support for civil/military seminars/workshops.
Agenda Item 7.2: Session on Aviation Safety issue		
	Action Item 54/23	<p>Issue No. 2: Runway Safety – Meeting the Challenges of Increasing Runway Excursions</p> <p>Recognizing runway safety occurrences were the most frequent accident category in the APAC and noting that in the 2016 APAC Annual Safety Report, Runway Safety Category (RS), specifically, Runway Excursion (RE), was identified as one of the top accident categories from 2006 – 2016, the Conference urged States/Administrations to:</p> <ul style="list-style-type: none"> a) establish runway safety programme; b) ensure the establishment and effectiveness of a Runway Safety Team (RST) at every International Airport in the region; and c) report the progress of constitution of RST and its functioning at all their International airports to the 55th DGCA Conference.
Agenda Item 7.3: Session on Aviation Security & Facilitation (AS&FL) issues		
	Action Item 54/24	<p>Issue No. 3: Resolution of Aviation Security Deficiencies</p> <p>Noting that CE 8 – Resolution of Security Concerns of States’ Aviation Security Oversight System is often the Critical Element with the lowest level of effective implementation as demonstrated through the results of ICAO USAP audits, the Conference recommended States/Administrations to :</p> <ul style="list-style-type: none"> a) recognise the importance of comprehensive legislative foundation to ensure effectiveness of the appropriate authority for aviation security and adequate graded enforcement mechanisms to ensure compliance with

		<p>national policies;</p> <p>b) ensure the establishment of the designated national appropriate authority for aviation security with sufficient resources and legal authority to enforce compliance with national requirements and implement enforcement mechanisms as required; and</p> <p>c) ensure that aviation security deficiencies identified through quality control activities are actively managed and tracked through the regulatory oversight system through development of software or database to record and monitor quality control activities and deficiencies identified together with corrective action plans.</p>
Agenda Item 9: Other Business		
DP/9c/3	Action Item 54/25	<p>Asia Pacific Civil Aviation Commission (APCAC) Feasibility Study – Progress Report</p> <p>Noting that APCAC Taskforce has determined that there was insufficient basis to establish an Asia Pacific Civil Aviation Commission (APCAC), the Conference:</p> <p>a) Agreed to conclude the APCAC feasibility study and establish a new Taskforce to focus exclusively on strengthening and evolving existing regional mechanism for regional cooperation, towards capability and capacity building and technical assistance; and</p> <p>b) Encourage States/Administrations to participate in the new Taskforce.</p>
	Action Item 54/26	<p>Draft Declaration of Civil Aviation Ministers' Conference</p> <p>The Conference agreed to presenting the draft Ministerial declaration for consideration at the Ministerial Conference to be held in early 2018.</p>
DP/9c/2	Action Item 54/27	<p>Acknowledging the benefit of participation by the President of ICAO Council, ICAO Secretary General, ICAO Council Representatives from the Region and Directors of ICAO Bureaus at the 54th DGCA Conference, the Conference urged for the participation in future Conferences by ICAO Air Navigation Commissioners and Council Members from APAC Region in addition to Senior Officials from ICAO.</p>

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LIST OF DISCUSSION AND INFORMATION PAPERS

REF	TITLE	PRESENTED BY
AGENDA ITEM 1: THEME TOPIC		
<i>“The Challenge of Managing Outcome Focused and Risk Based Regulations for Asia Pacific States”</i>		
DP/1/1	Theme Topic: “The Challenge of Managing Outcome Focused and Risk Based Regulations for Asia Pacific States”	ICAO
DP/1/2	Maximizing the Economic Benefits of Aviation by taking an “Outcome Focused” or “Better Regulation” Approach	IATA
IP/1/3	Using Sector Risk Profiling for Managing Risk Based Regulation and Oversight	Australia
DP/1/4	Performance-Based Regulation in the Asia Pacific Region	New Zealand
IP/1/5	Management of Safety Information for Risk Based Regulations	Pakistan
DP/1/6	UK CAA Experience of Becoming a ‘Performance Based Regulator’	United Kingdom
DP/1/7	Outcomes Based SARPS For Environmental and Efficiency Benefits	Kiribati
DP/1/8	Moving Towards a Risk-Based Approach in Safety Management	Singapore
AGENDA ITEM 2: REVIEW OF ACTION ITEMS ARISING FROM THE PREVIOUS CONFERENCE		
DP/2/1 Revision 1	Responses from Administrations to Action Items Arising from the 53rd Conference of Directors General of Civil Aviation, Asia and Pacific Regions	ICAO
IP/2/2	Indonesia KNKT Aircraft Accident and Incident Investigation Training Capabilities	Indonesia
IP/2/3 Revision 1	Review of Actions Taken by Viet Nam	Viet Nam

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AGENDA ITEM 3: AVIATION SAFETY AND AIR NAVIGATION		
IP/3/1	The Twenty-Second Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/22) Outcomes	ICAO
DP/3/2	Quality and Timeliness of Aeronautical Information	ICAO
IP/3/3	Enhancing Safety and Expanding Capacity: Implementation of ADS-B Out in the United States	USA
IP/3/4	Standard Risk-Based Principles for Validation of Civil Aeronautical Products	USA
DP/3/5	Proposed Global Strategy and Action Plan for the Improvement of Regional Safety Oversight Organizations (RSOOS) and the Establishment of a Global System for the Provision of Safety Oversight	ICAO
IP/3/6	CANSO Efforts in Airport Collaborative Decision Making	CANSO
DP/3/7	Automation Interface between Flight Information Regions	CANSO
DP/3/8	Managing Interference to Global Navigation Satellite System (GNSS)	IATA
DP/3/9 Revision 1	Initiatives to Promote Safe and Efficient Ground Handling Operations	IATA
IP/3/10	IATA Operational Safety Audit (IOSA)	IATA
DP/3/11	Implementation of Performance Based Communication and Surveillance (PBCS) in Asia Pacific	IATA
DP/3/12 Revision 1	Civil Aviation Regulatory Framework and Performance Based Regulations in Air Navigation	Mongolia
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IP/3/14	Runway Safety: A Shared Responsibility	IFALPA
IP/3/15	Aviation Sector Development and Its Future Plan in Bangladesh	Bangladesh
IP/3/16	Bangladesh's Preparation for the ICAO Validation Mission	Bangladesh

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IP/3/17	The Air Navigation Services in Pyongyang FIR/DPR Korea	DPRK
DP/3/18	Project Loon – Floating Cell Phone Towers in the Sky	CANSO
IP/3/19	China Civil Aviation's Experimentation and Reform on the Establishment of Operational Risk Control System in Transport Airlines	China
IP/3/20	Withdrawn	
IP/3/21	Withdrawn	
IP/3/22	Withdrawn	
DP/3/23	Operational and Information Management Framework to Support Cross-Border ATFM Implementation in the Asia Pacific Region	Australia, Cambodia, China, Hong Kong China, Indonesia, Malaysia, Philippines, Singapore, Thailand, CANSO and IATA
DP/3/24 Revision 1	Communication and Coordination on UAS Management	China
DP/3/25	Safety Management Measures	China
IP/3/26	Development of the Asian Aviation Meteorological Centre	China
IP/3/27	Development of Remotely Aerodrome Flight Information Services Procedures within Indonesia Airspace	Indonesia
IP/3/28	ADS-B Implementation Status in Indonesia and Data Sharing between Indonesia, Australia and Singapore	Indonesia
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IP/3/39	Central Air Traffic Flow Management Implementation in India	India
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DP/3/42	Harmonization of Airport Collaborative Decision Making (A-CDM) Practices	Singapore
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IP/3/46	Implementation of Safety Management Initiatives in Hong Kong, China	Hong Kong China
IP/3/47	Air Traffic Growth in Asia-Pacific and the Role of Air Traffic Flow Management	Hong Kong China
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DP/3/59	Implementation and Efficient Management of ICAO SARPS Regarding Alternative Fire Extinguishing Agent to Halon Fire Extinguishers	Republic of Korea
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IP/5/5	To Develop a Green Civil Aviation through Upgrading Existing Facilities and Introducing Green, Renewable and Low-Carbon Growth	China
DP/5/6	withdrawn	
DP/5/7	Indonesia Visions on ICAO Short-Term Priorities: Alternative Fuels and the Challenge of Implementing New CORSIA Regulations (SARPS)	Indonesia
IP/5/8	"Eco-Airport" Initiatives and Technical Assistances by Japan	Japan
DP/5/9	Views and Efforts of Japan on Monitoring CO2 Emissions from Aviation	Japan
IP/5/10	Environmental Friendly Airside Vegetation Management	India
DP/5/11	Energy Management at Indian Airports through Use of Solar Power	India
DP/5/12	Use of Sustainable Alternative Fuels for International Aviation	Singapore
IP/5/13	Measures Taken by Pakistan CAA to Improve the Environment	Pakistan
AGENDA ITEM 6: TECHNICAL AND REGIONAL COOPERATION		
IP/6/1	Trans-Tasman Approach to Sector Risk Profiling	Australia and New Zealand
DP/6/2	China Civil Aircraft Tracking and Monitoring System	China

REF	TITLE	PRESENTED BY
DP/6/3	Withdrawn	
IP/6/4	Withdrawn	
DP/6/5	Withdrawn	
IP/6/6	Application of Simulation Technology to Airport Planning and Design	China
IP/6/7	Technical Code for High Filling Engineering of Airport (MH/T 5035-2017)	China
DP/6/8	Regional Collaboration to Manage SUAS Operations	Indonesia
DP/6/9	Regional Cooperation toward Aeronautical Information Management	Mongolia
IP/6/10	Japan's Contribution to NCLB Initiative	Japan
DP/6/11 Revision 2	Air Transport Management Training	France and Hong Kong China
IP/6/12	Aviation Safety Programs for the Asean Region	France
IP/6/13	Current Surveillance System Implementation and Planning	Mongolia
IP/6/14	Implementation of AIDC/OLDI System	Mongolia
IP/6/15	Standardised Capacity Building Programme for the Asia and Pacific Regions	Singapore
IP/6/16	Fostering of Aviation Security in Response to Contemporary Challenges at Global, Regional and National Levels	Russian Federation
DP/6/17 Revision 1	Implementation of the Asia Pacific Aeronautical Network, CRV	ICAO
DP/6/18	Sustaining Technical Assistance Efforts in APAC through ICAO APAC Combined Action Team (CAT) Programme ICAO	ICAO
IP/6/19	Development of National Civil Aviation Personnel through ICAO Developing Countries Training Programmes	ICAO
IP/6/20	ICAO Regional Cooperation in the Asia and Pacific Regions	ICAO
IP/6/21	ICAO TCB Technical Cooperation to Bangladesh, CAA Inspectors' Staffing Requirements and their Remuneration	Bangladesh

REF	TITLE	PRESENTED BY
AGENDA ITEM 9: OTHER BUSINESS		
a) THEME TOPIC FOR THE FORTHCOMING CONFERENCE OF DGCA's		
DP/9c/1	Schedule of Meetings/ Seminars/ Workshops to be Convened in 2018 by the ICAO Asia and Pacific Office	ICAO
b) ENDORSEMENT OF ACTION ITEMS ARISING FROM THE PRESENT CONFERENCE		
	—	
c) ANY OTHER MATTERS		
DP/9c/1	Schedule of Meetings/ Seminars/ Workshops to be Convened in 2018 by the ICAO Asia and Pacific Office	ICAO
DP/9c/2	Schedule of Conferences of DGCA's in the Foreseeable Future	ICAO
DP/9c/3	Asia Pacific Civil Aviation Commission (APCAC) Feasibility Study – Progress Report	Chair APCACTF

**54TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

WELCOME SPEECH BY

MR. BYAMBASUREN LUVSANSAMBUU

**THE DIRECTOR GENERAL OF
CIVIL AVIATION AUTHORITY OF MONGOLIA**

*Your Excellency Dr. Olumuyiwa Benard Aliu, President of the ICAO Council,
Honorable Dr. Fang Liu, Secretary General of the ICAO,
Dear Mr. Arun Mishra, Director of the ICAO Asia Pacific Office,
Your Excellency Mr. Ganbat, Minister of Road and Transport Development of Mongolia,
Esteemed Director Generals of the civil aviation of the regional countries,
Representatives of the Civil aviation international organizations,*

Ladies and Gentlemen,

First I would like to welcome all of you in Mongolia, the country of eternal blue sky. And native land of the great Mongolian king Chinggis Khaan.

Using this opportunity, I would like to extend our sincere gratitude on behalf of all staff of the Mongolian Civil Aviation Authority, to the International Civil Aviation Organization and its Asia Pacific office who rendered Assistancess focused on the Cultivation of the national aviation policy and regulations and permanently encouraged the activities of the civil aviation sector of Mongolia.

We outline with pleasure, the considerable contribution of Mongolia, focused on the upgrade of the air transportation Safety and Security level, —provision of the Flexible and operative navigation services in the virtue of its implemented aviation policy and activity in the region of Asia and Pacific.

Ladies and Gentlemen,

Civil Aviation Authority of Mongolia is expressing herewith its Gramercy to each country, each member of the international civil aviation association, for their efforts.

As the Hosting country of the 54th Conference, I would like to address “No Country Left Behind” appeal raised from the previous Conference, as the principle of performance, mutual assistance, fundament of the joint decisions of the member states. I believe that “No Country Left Behind” appeal is required to endeavor to create the most favorable conditions by the Aviation-developed countries —for others.

On behalf of the WHOLE staff of Mongolian civil aviation, ==hosting the Conference for the Second time, I would like to assure you, that we do all our utmost to make your stay in Ulaanbaatar as much comfortable and available to be introduced into the national customs, traditions and current economic and civil aviation development of Mongolia.

We believe that the 54th Conference under the topic “Challenge of Managing Outcome-Focused and Risk-based Regulations for Asia Pacific States” will serve as the creative action to craft a key to new stage of regional civil aviation development.

At last, I would like to express my high gratitude for your attention and to wish a success to the Conference.

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**54TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

**OPENING REMARKS BY THE SECRETARY GENERAL
OF THE INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)**

DR. FANG LIU

TO THE 54TH ASIA-PACIFIC DGCA CONFERENCE

(Ulaanbaatar, Mongolia – 7 August 2017)

*Honourable Minister of Transport for Mongolia, Mr. Dangaa Ganbat,
ICAO Council President, Dr. Olumuyiwa Benard Aliu,
Distinguished Asia-Pacific Directors General of Civil Aviation,
Heads of Delegations,
Delegates from States, Industry Partners and International Organizations,*

Ladies and Gentlemen,

1. It is a great honour to help open this 54th DGCA Conference here in Ulan Bator, generously hosted by the Government of Mongolia.
2. I would first like to thank our colleagues at the Mongolian CAA, led by your Director General of Civil Aviation, Mr. Byambasuren Luvsansambuu, for the excellent facilities and arrangements which have been prepared for us.
3. Following the last year's ICAO Assembly we have taken significant steps to improve the implementation of our strategic objectives. We have developed Operating plans and business plans and align the activities of Regional Office with the HQs within this framework. The ICAO Assembly decided to strengthen the functioning of the Regional Offices and have created three new positions relating Safety, Air Navigation and Security in the APAC Regional Office which would certainly translate into increased assistance activities in the region.
4. We are also closely coordinating with the various bodies within the United Nations system to establish linkages between our strategic objectives with those of the UN SDGs for 2030. The objective is to bring in support for our ongoing No Country Left Behind program from other UN agencies and International organizations.
5. To enhance the effectiveness of your work over the coming days, this year's Asia-Pacific DGCA has been designed differently from previous conferences to make it more results-focused.

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6. It will still provide us with an excellent opportunity to discuss regional issues of importance, but this year our APAC Regional Office has taken a new initiative to reform your event with a stronger focus on implementation. There will also be a series of interactive sessions to help you move forward on agreed regional targets and priorities.
7. This year we have also introduced a Panel Discussion featuring some of the most renowned international aviation personalities and their visions for the future of air transport in the Asia Pacific.
I greatly look forward to moderating this discussion tomorrow.
8. Regarding the interactive aspects of this event, you'll have noticed that one full day is being devoted to a new format of intensive group discussions between DGs and senior officials, on three distinct topics identified as major challenges in this region: namely Runway Safety; Civil Military Cooperation; and the Resolution of Security deficiencies.
9. During these interactive breakout sessions for the DGs, a separate Technology session will be held for the other participants. This will review the latest technology solutions for addressing challenges in areas of safety, air navigation services and security, and will be aided by our industry partners and other international organizations who are with us here.
10. An additional session will be focusing on PBN implementation, another important challenge and priority for us in this region, both from an airspace usage and efficiency standpoint, as well as in terms of the PBN environmental benefits relating to decreased fuel burn and emissions, and improved local noise and air quality metrics around airports.
11. To promote greater cooperation, coordination and collaboration during our stay in Ulaanbaatar, we would like to encourage more networking meetings to take advantage of the important cross-section of senior APAC aviation officials and industry stakeholders.
12. Our hosts have arranged for dedicated meeting rooms for this purpose, and a help desk outside the conference hall is standing by to assist you.
13. During the past year, Director Mishra and his Bangkok Regional Office team have been ramping up their efforts to assist Asia-Pacific States with SARP implementation and other objectives. The Combined Action Teams initiative is just one such example and should be well known to all of you by now.
14. With helpful support from local champion States and partnering international organizations, Action Team support was provided to 11 APAC member States last year. These States were chosen due to their safety audit Effective Implementation ratings being below the global average of 60%, and a further 10 CAT missions are being undertaken this year with the same objectives.
15. We've been greatly encouraged by the enthusiasm and commitments from these States as the CAT process has gotten underway, and are already seeing solid results. The EIs of several assisted States have shown an upward trend i.e Nepal, Philippines, Papua New Guinea, Indonesia, Cambodia etc. PBN Go team initiative started this year by the Regional Office is also expected to improve the PBN implementation status in the region. The Regional office also working with donor States to mobilise resources for capacity building in States with low EI.

16. In the area of air navigation, rapid growth is posing more and more new challenges and some of these will be discussed during this conference.
17. The 10 regional targets and priorities adopted by the 2014 APANPIRG should continue to guide this work, but we still face a number of important challenges in that regard due to insufficient progress. For example with respect to the important PBN implementation priorities I mentioned earlier, only 9 States out of the 24 who have reported back to us have achieved the regional target.
18. One area where we can all continue to take great pride is Aviation Safety. 2016 was the safest year ever for scheduled commercial air travel, and here in the APAC region you achieved an admirable 1.79 accidents per million departures compared to global average of 2.44. This represents a 27 per cent decrease compared to the previous year.
19. On another quite positive note, it is heartening to see that Nepal has now successfully resolved their Significant Safety Concern. This has been possible due to close coordination between Nepal CAA, the Regional Office, the COSCAP South Asia and the Safe funding for technical assistance from ICAO Hqs.
20. In the area of Aviation Security and Facilitation, we have made significant progress which will be shared in detail with you by the Chair of RASCF later in this conference. To foster closer cooperation with International agencies to implement the UN Security Council Resolutions and the UN Global counter terrorism strategy the Regional Office also coordinated with these agencies by participating in their various programs including raising their awareness about the ICAO TRIP program. We are also working closely with States like US and Canada to develop and implement State specific capacity building programs in aviation security.
21. Globally our sector continues to face significant challenges with new and emerging security threats, and the APAC region is no exception. Aviation remains a preferred target for terrorism, and ICAO has been working very closely through the UN Security Council and with other partners so that aviation can maximize its contributions to the global effort to minimize the international mobility of terrorists and other trans-border criminals.
22. Before passing the podium over to President Aliu for his keynote this morning, I would like to draw your attention to the fact that the year after next, 2019, will mark the 75th Anniversary of the signing of the Convention on International Civil Aviation.
23. This historic event will coincide with our hosting of the 40th ICAO Triennial Assembly, and while we are still some distance away from these events I would like to encourage your States to begin considering and planning special events and outreach efforts designed to highlight the remarkable contributions and achievements of international aviation.
24. This may include for instance the development and issuance of commemorative national stamps or coins, special publications on the history of air transport development in your States and territories, or public information displays showcasing the important role of aviation in the daily lives of your citizens and businesses.

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25. Importantly, major anniversaries of this nature should also be seen as opportunities for us to focus on our sector's future, even as we appreciate its past contributions and progress. Your region's next DGCA Conference will be taking place that very same year, and so will provide an excellent platform to build upon.
26. We have yet to identify a Host State for that event, which we expect to be one of the more prestigious APAC DGCAs of our generation.
27. Ladies and gentlemen, it has been my honour to help open this event today, and to begin to set the stage for what is to come.
28. This is a very exciting time for air transport, here in the APAC Region and all over the world, and the inputs and partnership of Directors General of Civil Aviation such as yourselves will only be of growing importance as we seek to meet our new challenges, together. You may be aware the Regional office has initiated a coordination mechanism with the States to develop a roadmap for safety and efficiency of air navigation which will be deliberated by the Ministers of the Region in the Ministerial Conference planned to be held in January 2018.
29. ICAO, with important contributions from our Regional Offices, has been re-engineering itself of late to be a more streamlined organization; one focused on supporting your more effective ICAO compliance and, ultimately, the augmented and sustainable prosperity of your local populations and economies.
30. To continue this work, and ensure our shared success, we must count on the full support of you, our Member States, as well as the many industry partners, United Nations and other international organizations who are so essential to our work.
31. I look forward to working with you here on the basis of the new and more interactive format we have designed for this meeting, as well, of course, to the outcomes it helps us to realize.
32. Thank you.

**54TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

**KEYNOTE ADDRESS BY THE COUNCIL PRESIDENT
OF THE INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)**

DR. OLUMUYIWA BENARD ALIU

TO THE 54TH ASIA-PACIFIC DGCA CONFERENCE
(Ulaanbaatar, Mongolia – 7 August 2017)

*Minister Ganbat,
Secretary General Liu,
Distinguished friends and colleagues,
Ladies and gentlemen,*

Please let me begin by reiterating our most sincere thanks to the Government of Mongolia for hosting this very important 54th Conference of Directors General of Civil Aviation, Asia and Pacific Regions.

And may I also please express ICAO's deep appreciation to Minister Ganbat and the other senior Mongolian government functionaries who have joined us here in Ulaanbaatar. The honour of your presence provides a very helpful reminder of the increasing importance of these events to our many and challenging objectives for Asia-Pacific air transport.

In 2016, aviation directly generated some 10 million jobs and 725 billion dollars in global GDP. ICAO's air transport results show that 3.8 billion passengers were carried by air last year, a six per cent increase over 2015. The number of departures rose to approximately 35 million globally, with passenger traffic increasing by 6.3 per cent, and freight traffic growing by 2.6 per cent.

Much of this recent growth, especially here in the ICAO Asia-Pacific Region, has been fuelled by first-time flyers arising from a growing middle class population. Additionally, this region already has the largest share of the world's urban population in its cities and this adds further momentum to growth cycles being witnessed here.

But while the Asia-Pacific presently leads the world in terms of traffic growth, it also faces attendant challenges with respect to managing and sustaining it, safely, securely and efficiently. I would take this opportunity to highlight some of these challenges.

Firstly and most obviously, constant increases in air traffic have made the objective of maintaining maximum operational capacity and efficiency increasingly complex. There is therefore an urgent need for airport operators and air navigation service providers to manage the demand against the capacity of airport and Air Traffic Management systems.

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And while runways are typically the main capacity bottlenecks at your local airports, aircraft parking stands, baggage sorting and transfer facilities, aprons, and passenger security screening points are becoming choke points as well. This is especially the case at hub airports.

Secondly, we must consider the Safety of operations. Aviation requires the coordination of a very wide range of activities and stakeholders, and if these are not effectively managed and mitigated, they can lead to higher accident risks.

In this regard, your Asia Pacific Regional Aviation Safety Group (RASG) has developed specific Safety Enhancement Initiatives (SEIs), refined on the basis of an effective data driven mechanism and also published the APAC Safety Report, and it is essential that these be dealt with by your civil aviation officials as a matter of the highest priority.

Uncertainty in various Regulatory regimes is another challenge we must face together. Aviation infrastructure requires massive investments characterized by long gestation periods. And a key problem faced today by many investors in some developing economies is the instability in economic regulatory regimes which can have a major adverse impact on the financial model of the project.

To promote a more steady and reliable flow of capital to realize your aviation objectives, governments must ensure a stable regulatory framework.

Human Resource capacity is another critical area of concern. Insufficient capacity of training organizations poses challenges with respect to your need for qualified aviation professionals to meet the demands of the significant regional traffic growth being projected.

Simply stated, growth cannot occur without skilled and well-trained officials and professionals to continuously assess and manage it. This is precisely why we have upgraded our Next Generation of Aviation Professionals initiative to the programme level in ICAO, and why we will be convening the very first Global NGAP Summit in Montreal later this year.

Governments, together with Industry partners, academic institutions and organizations like ICAO, IATA, CANSO & ACI, urgently need to join forces to promote the next generation of aviation professionals and sustain our current growth and performance levels, in terms of numbers and competencies of aviation personnel.

Air Traffic Congestion is a major challenge to growth in Asia. Meanwhile, some 60-70 per cent of airspace in Asia is presently not available for civilian traffic management and this is a key issue to be addressed in the near-term. ICAO is therefore leading efforts to increase the number of new air routes, implement an Air Traffic Flow Management System, and to realize a more flexible local approach to the sharing of airspace by civil and military operators.

In terms of your environmental challenges, concerns relating to local noise, air quality, and greenhouse gas emissions are becoming critical bottlenecks for further sectoral expansion. However as a sector, we should be quite proud of the significant improvements which have recently been achieved, for instance on the new Aircraft CO₂ Standard which the Council adopted this past March, or on the historic Carbon Offsetting and Reduction Scheme for International Aviation, or *CORSIA*, which was adopted at our Assembly last October.

I would like to express my appreciation for the collaboration of all stakeholders in reaching that historic global market-based measure achievement.

I am pleased that currently 71 countries representing over 88 per cent of international flight operations had signalled their eagerness to participate in the CORSIA from its earliest pilot phase. I would strongly encourage any States who have not yet committed to CORSIA to do so at their earliest opportunity.

Regarding compliance with the ICAO SARPs more generally, Asia-Pacific States must undertake to continue to strengthen their performance in this area through effective and well-resourced civil aviation authorities (CAAs). This entails the CAAs having adequate financial and management autonomy and the ability to attract, recruit and retain qualified technical personnel to regulate the growing aviation industry.

Regulators must be strengthened in tandem and in pace with industry to ensure a safe, secure and efficient network, and to realize the economic benefits which air transport connectivity provides.

As our global safety performance continues to improve, aided importantly by our cooperative efforts under the ICAO Global Aviation Safety Plan (GASP), we have begun to focus greater attention on some specific challenges.

One of these involves the effectiveness of Regional Safety Oversight Organizations (RSOOs), which as you will know are established to optimize collective oversight capacities of groups of States, particularly where individual national systems are not well resourced.

We are currently reviewing strategies to empower and strengthen existing regional mechanisms, while at the same time working toward the establishment of a new Global Aviation Safety Oversight System (GASOS).

There are also some other emerging challenges which we are still working to regulate, for example the increasing use of unmanned aircraft systems, or Drones. Aviation is undergoing a fundamental change in light of the widespread introduction of unmanned aircraft, which until recently have operated on the periphery of the aerospace system.

That, however, is no longer the case. We are now seeing new types of aircraft, new types of operations and locations for these operations.

Moreover, in the Asia-Pacific and throughout the world, we are already seeing new businesses and humanitarian operations leveraging these technologies and the opportunities they offer. This is occurring in ways that was not envisioned just a decade ago.

During our 39th Assembly last October, States requested that ICAO expand its scope of work to provide a baseline of provisions to ensure global harmonization for all types of unmanned aircraft and their operations, including domestic.

When reviewing the Assembly resolutions and decisions, the Council supported the call for ICAO to assume a much broader role. This will take us well into the unusual domain of domestic operations, but in engaging this work, beginning with our DroneEnable event later this year, we will also help to facilitate earlier implementation of regulations for drones by States, and new common baselines for manufacturers to build to and for operators large and small to duly comply with.

Another major and rapidly evolving challenge we have been working to address concerns aviation Cybersecurity.

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At ICAO's 39th Assembly last October, world governments signalled their awareness and concern over these issues through Resolution A39-19. Its adoption demonstrated the common desire of ICAO, States and industry to address cyber threats through a cross-cutting, horizontal and functional approach.

It was for these and other reasons that ICAO convened its very first Cyber Summit earlier this year in Dubai, a key outcome of which was a Declaration which is now helping to guide our joint efforts toward an effective and collaborative global cybersecurity response to protect our networks, our infrastructure and our customers.

Our definition of this threat context is especially relevant today, given that new System-wide Information Management (SWIM) provisions will begin to come into force as of 2018 making us more connected and integrated as a global network than ever before.

These and many other issues will be considered further in just a few weeks' time, when ICAO convenes its inaugural Aviation Security Symposium in September.

Dear colleagues, in line with our *No Country Left Behind* initiative, I would like to reaffirm our commitment to continue to assist our Member States in optimizing the incredible benefits of aviation by assuring that they have the tools and capacities they need to assure effective compliance with international standards.

Director Mishra and his Regional Office colleagues have launched a major initiative for supporting this programme – the APAC Combined Action Team (CAT), and it is getting exemplary reviews thus far from many local States.

In this regard, I am particularly conscious of the challenges faced in your Region by Pacific Island States, mainly arising from their remoteness and small populations.

For these States air transportation provides vital national, regional and international connectivity. Air services are essential for the import and export of goods and a prerequisite for tourism development. A reliable network of air links within and among island countries, and to major air transport hubs, is therefore essential to the viability of these countries from humanitarian, political and economic perspectives.

The problems facing these States in the aviation sector are similar in nature; however the acute resource crunch in the Pacific Island States poses a complex challenge that truly demands a new approach and comprehensive sub-regional plan.

While recognizing the considerable resources and effort deployed by established Assistance Partners like the World Bank, as well as States like Australia, New Zealand, Singapore and others, the impact of these investments is not always evident when we review associated aviation performance indicators.

I would therefore encourage that a strategy needs to be developed to comprehensively deal with current safety and security issues, for instance by channeling all the resources available from the various partners, in a more systematic manner and by creating a proper institutional framework for implementation.

ICAO is presently working on commissioning a comprehensive study to examine the related challenges and prepare a roadmap for the systematic development which is needed here, aligning it closely with the UN Sustainable Development Goals under *Agenda 2030*.

Ladies and gentlemen, we have many important priorities and challenges before us with respect to the performance and sustainability of future Asia-Pacific civil aviation.

While individually these may seem complex and daunting, I would remind you that ICAO's main *Global Plans for Aviation Safety* and *Air Navigation Capacity and Efficiency*, as well as our new *Global Aviation Security Plan* which was endorsed by the ICAO Council this past June, are veritable mechanisms available to support States in addressing the various challenges in a coordinated manner.

By adhering to the many priorities and guidelines outlined in these Global Plans, governments and industry can move forward with greater investment certainty, while expanding their sectors and businesses in a manner which is fully harmonized with global norms.

The ICAO Asia-Pacific Regional Office plans to organize a regional seminar to raise your awareness and understanding of the Global Aviation Security Plan and its overall objectives later this year, and I would strongly urge you to participate.

I am also very happy to note that the first Asia-Pacific Ministerial Conference will be held in early 2018, hosted by China. I have seen the draft declaration, which is a major step towards your formalized collective resolve to achieve your shared goals here. I look forward with keen anticipation to participating in this first ever meeting of Asia-Pacific Ministers, and to the results it delivers.

In closing now, please let me remind you that regional meetings such as this one, and others we convene, are critical to maintaining the cooperation and collaboration which has been the hallmark of air transport progress since the dawn of the civil aviation era.

I would strongly urge you to uphold their value, and the fact that your participation, above all, will make the most important contributions to their results, impact, and sustainability.

On that note please let me wish you all a very productive and rewarding 54th DGCA event.

Thank You.

54TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS

ADDRESS BY

HON. JARGALTULGA ERDENEBAT
THE PRIME MINISTER OF MONGOLIA

МОНГОЛ УЛСЫН ЕРӨНХИЙ САЙДЫН
ИЛГЭЭЛТ

*Олон улсын иргэний нисэхийн байгууллага
/ИКАО/-ын Ази Номхон далайн бүсийн орнуудын
Иргэний нисэхийн Ерөнхий захирлуудын
54-р хуралд оролцогчдод*

Олон улсын иргэний нисэхийн байгууллагын Ази-Номхон далайн бүсийн орнуудын иргэний нисэхийн ерөнхий захирлуудын 54 дүгээр хуралд оролцохоор манай улсад хуран чуулсан эрхэм хүндэт зочид, олон улсын байгууллагын төлөөлөгчид, ноёд хатагтай нар аа.

Бүс нутгийн иргэний нисэхийн цаашдын хөгжлийн бодлогыг тодорхойлох, хамтын ажиллагааг гүнзгийрүүлэх зорилгоор Монгол Улсын нийслэл Улаанбаатар хотод хүрэлцэн ирсэн Та бүгдэд Монгол Улсын Засгийн газрын өмнөөс болон өөрийн зүгээс чин сэтгэлийн талархал дэвшүүлж байна.

Монгол Улс 1989 онд Олон улсын иргэний нисэхийн байгууллагын бүрэн эрхт гишүүн болсноор манай улсын иргэний нисэхийн салбар хөгжлийнхөө шинэ шатанд дэвшин гарч, дэлхийтэй харьцах өргөн боломжтой болсон билээ. Өнгөрсөн хугацаанд манай улс Олон улсын иргэний нисэхийн байгууллагаас гаргасан бодлогын бичиг баримт, практик зөвлөмжийг баримтлан олон улсын хамтын нийгэмлэгт өөрийн байр суурийг бэхжүүлж, гадаад харилцааныхаа цар хүрээг тэлсээр ирсэн. Мөн тив хоорондын агаарын тээвэрт гүйцэтгэх манай улсын үүрэг улам өсөж, улс орнуудын эдийн засгийн хөгжил, хамтын ажиллагаанд чухал байр суурь эзлэх боллоо.

Монгол Улсын Засгийн газар иргэний нисэхийн салбарыг олон чиглэлд хөгжүүлэх, Монгол Улсын агаарын зайн ашиглалтыг либералчлах, агаарын навигацийн үйлчилгээнд орчин үеийн техник, технологи нэвтрүүлэх, олон улсын нисгэх буудлын хүчин чадлыг нэмэгдүүлэх талаар шат дараатай арга хэмжээг амжилттай авч хэрэгжүүлж байна.

Олон улсын иргэний нисэхийн байгууллагын байнгын дэмжлэг, хэрэгжүүлсэн төсөл хөтөлбөрийн үр дүнд манай үндэсний агаарын тээвэр олон улсад нэр хүндтэй салбар боллоо.

Манай Засгийн газрын дунд болон урт хугацааны зорилт хөтөлбөр олон улсын иргэний нисэхийн хамтын нийгэмлэг, агаарын хөлөг үйлдвэрлэгчид, иргэний нисэхийн салбарын хамтын ажиллагаа, харилцан туслалцааны дүнд амжилттай хөгжинө гэдэгт итгэлтэй байна.

Бүс нутгийн иргэний нисэхийн удирдлагуудын энэ удаагийн хурлын үйл ажиллагаанд амжилт хүсье.

МОНГОЛ УЛСЫН
ЖАРГАЛТУЛГЫН
ЕРӨНХИЙ САЙД

ЭРДЭНЭБАТ

2017 оны 8 сарын 7-ны өдөр Улаанбаатар хот

Greeting from Prime Minister of Mongolia.

To the participants of the 54th Conference of the Civil Aviation

Directors General of Asia Pacific region

of International Civil Aviation Organization.

Dear delegates, representatives of the international organizations, Ladies and Gentlemen, gathered in our country to participate in the 54th Conference of the Civil Aviation Directors General of the Asia, Pacific region of the International Civil Aviation organization.

On behalf of the Government of Mongolia and on my personal behalf, I would like to express a sincere gratitude to all of You, who came to Ulaanbaatar, the capital city of Mongolia, to determine a development policy for civil aviation in the region and to strengthen collaboration between the member countries.

Since 1989 when Mongolia became a full member of the International Civil Aviation Organization, our national civil aviation sector has entered a new stage of its development and acquired a broad opportunity to link with rest of the world.

Until today, Mongolian civil aviation has been operating in accordance with the policy guidelines, standards and recommended practices developed by the International civil aviation organization (ICAO), improving its position in the international civil aviation community and expanding the scope of its foreign relations. The role of Mongolia in inter-continental air transportation has been continuously increasing and we have achieved an important position in the arena of international economic development and co-operation.

The Government of Mongolia has been progressively and effectively implementing major reforms towards liberalization of Mongolian air space utilization, introduction of modern technologies in upgrading the national air navigation systems, and expanding the capacity of our international airports.

As a result of ICAO's continuous assistance to Mongolia and implementation of its programs and projects, the air transportation sector of Mongolia achieved recognition at an international level.

The Government of Mongolia is confident that the long and mid-term development objectives defined for the national air transportation sector will be successfully implemented through collaboration with the international civil aviation community, aircraft manufacturers and civil aviation authorities of the region.

I would like to wish success to the conference.

PRIME MINISTER OF MONGOLIA

JARGALTULGA ERDENEBAT

**54TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

ADDRESS BY

**MINISTER GANBAT DANGAA
MINISTER OF ROAD AND TRANSPORT DEVELOPMENT OF MONGOLIA**

АЗИ, НОМХОН ДАЛАЙН БҮС НУТГИЙН ОРНУУДЫН ИРГЭНИЙ НИСЭХИЙН
ЕРӨНХИЙ ЗАХИРЛУУДЫН 54 ДҮГЭЭР ХУРЛЫН НЭЭЛТЭД ЗОРИУЛЖ ЗАМ,
ТЭЭВРИЙН ХӨГЖЛИЙН САЙД Д.ГАНБАТЫН ХЭЛЭХ ҮГ

Your Excellency Dr. Олумуива Бенард Алиу (Olumuyiwa Benard Aliu), President
of the council of International Civil Aviation Organization,

Distinguished Dr. Fang Liu, Secretary General of the International Civil Aviation
Organization,

Dear Mr. Arun Mishra, Director of the Asia Pacific Office of the ICAO,

Esteemed Directors General of the Civil Aviation of the countries in the Region,

Dear participants,

Ladies and Gentlemen,

I wish to express my sincere gratitude for your coming to Mongolia, a
country of centuries-long history and picturesque nature, a country well known by
its hospitable people and reach traditions. You've gathered here to discuss and
define the development policy priorities of civil aviation in the Asia and Pacific
region and streamline it with the global civil aviation policy objectives.

Using this opportunity, I warmly welcome every one of you to my homeland
– Mongolia, a country that continues to expand its international cooperation,
participates in and contributes to the regional and global economic and social
development.

We have one planet and we have one common goal.

Of course, depending on the national specifics, the challenges of civil
aviation are different in every country, so are the solutions. However, under the
“No Country Left Behind” Initiative proposed by the past ICAO Assembly, we are
parts of one integrated system.

Therefore, our foremost priority is to bring international collaboration between civil aviation organizations of the member states to a whole new level by achieving progress in well-coordinated partnership.

As a full member of the international civil aviation community, Mongolia has been closely collaborating with the ICAO and operating in accordance with the guidelines, decisions, recommended practices and policy directions of this organization.

For Mongolia, a landlocked country with vast territory, air transportation is one of the key sectors of national economy. Advantageously located between Asia and Europe, Mongolia is duly following the ICAO policy recommendations and continues to upgrade its air navigation systems by acquiring the latest technical and technological innovations. I'm proud to highlight that we have succeeded in establishing a reliable and safe air navigation service framework and became one of the main base platforms of the international transit flights.

The present 54th Conference being organized in Mongolia will mark an important milestone, linking the past, present and future by summarizing the work done, formulating the new objectives and defining the implementation strategies. The Ministry of Road and Transport Development of Mongolia considers this Conference as an important venue not only for determining the sector policies, but also as a unique opportunity to boost collaboration in the civil aviation community and a platform for exchange of experiences and knowledge.

Dear participants,

I am confident that during this conference, the delegates from different countries, representatives of international organizations and industries will effectively discuss the opportunities for their contribution to the development of the air transportation sector, exchange information about available resources and capacities, and share innovative ideas.

I would like to assure that Mongolia, over the territory of which lay the shortest air routes linking Asia, Europe and America, will continue to provide reliable and safe air navigation services based on its system fully equipped with the latest techniques and technologies. We are determined to continue our contribution to further development of civil aviation on the Asia and Pacific region.

I thank all participants and wish success to the conference. I'm also honored to welcome all of you again to the country of eternal blue skies in the heart of Euroasia, the native land of the great emperor Genghis Khaan. I invite you to learn from our long history, rich traditions, nomadic culture and witness modern Mongolia's development progress.

Let the skies be clear, vessels be fast, and roads be smooth.

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54TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS

CLOSING REMARKS BY THE SECRETARY GENERAL
OF THE INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO)

DR. FANG LIU,

TO THE 54TH ASIA-PACIFIC DGCA CONFERENCE

(Ulaanbaatar, Mongolia – 11 August 2017)

*Director General of Civil Aviation Mongolia,
Directors General and CEOs of Civil Aviation Administrations,
Head of Delegations,
Delegates*

1. I think it's most appropriate to begin these closing remarks with a very simple and straightforward... *thank you*.
2. In the first case we need to thank you for your enthusiastic participation and openness to engage in the new format we established, and secondly for the very productive results you've helped us to achieve.
3. Let's review some of those briefly.
4. **To begin**, this year we hosted 299 delegates from 34 States and 2 Special Administration Regions and 11 international organizations here in Ulaanbaatar. I am confident that with continued high-levels of support and participation this region will only improve in its responsiveness and effective results on our latest challenges with respect to aviation safety, security, efficiency and sustainability.
5. **On the** challenging topic of delivering results and risk-based regulations, we enjoyed some very high quality papers presenting both practical and goal-oriented perspectives on our need for more performance-based regulations.
6. As the air transport industry moves toward a more structured regulatory regime, with increasing emphasis placed on accountability, ICAO is moving in the same direction. ICAO Secretariat is currently integrating a performance framework into our Business Plan, and this is already having positive impacts on our planning approaches for air navigation system implementation.

7. With the aim of facilitating safety and efficiency, many ICAO Standards have already been developed, or are being developed, on the basis of performance objectives. This trend toward establishing performance objectives for all aspects of ICAO activities, including standards development, will only continue.
8. Coming back to our DGCA Conference, ICAO has been trying to facilitate an implementation-focused meeting. In the past week, we have been concentrated on very important priority topics for Asia-Pacific States and it was very encouraging to see some robust action Items which over the short- to medium-term will contribute importantly towards common implementation plans.
9. With the Regional safety meetings held separately this year, we had a full five days devoted to the DGCA Conference. This allowed us the opportunity to maximize the benefits of the various forums and test out some new concepts, with the end result being a fresher and more dynamic conference on a challenging agenda. We've heard a number of positive reviews over the course of the event which support these observations, but of course the overall results and success will be subjected to a more thorough post-mortem.
10. **We were able to appreciate and benefit from a special high level panel discussion on the second day of this conference. It is not often that we have an opportunity to benefit from the perspectives and inputs of such a distinguished cross-section of global leaders.**
11. The international aviation community is watching this region with keen interest today, especially as you've become the largest air transport market in the world and continue to experience rapid growth. We must recall that it is in our shared interest to manage this growth together and see that it is implemented uniformly throughout the Asia-Pacific, which will help deliver greater levels of economic prosperity to all of your States and territories.
12. The presentation on Low Cost Carriers and Asia Pacific growth by Aireen Omar of Air Asia was also very enlightening. This air transport market segment is intrinsic to Asia-Pacific air transport growth and, as such, must be duly appreciated and incentivized in our regulatory frameworks.
13. As just alluded to, and very much consistent with the Chicago Convention, it remains our goal to ensure LCC growth, like all air transport development, is encouraged uniformly and for the benefit of all member States.
14. And in light of its lower-cost approaches, we must also recognize the responsibility to ensure that improved airline efficiencies and profitability are not achieved at the expense of our safety, security, capacity or environmental targets.

15. The technology side events which were arranged were very popular and provided us with valuable networking opportunities. I would like to extend our shared thanks to all of our industry partners for their valuable contributions to this new initiative, and it was interesting to see how the solutions they were presenting complimented the discussions of the workshop breakout sessions.
16. We must also appreciate the more traditional DGCA content presented by ICAO's APANPIRG and Regional Safety stakeholders. I would like to thank the respective chairpersons of these groups for the operational and technical recommendations provided, and for their continued leadership of these essential coordinating bodies.
17. I also must encourage all APAC States to be more vigilant in assuring your responses and inputs to the State Letters issued by these regional groups, and that you continue to actively participate in their meetings and work.
18. Determined cooperation of this nature, as well as a clear commitment to regional programmes and targets, is absolutely essential to successful and sustainable aviation progress, and by endeavouring to be more responsive we could help to accelerate the effective implementation of regional safety, security and air navigation priorities and mobilize your commitments.
19. **I understand that there are some challenges being experienced in this regard.** I've been discussing ways and means to improve these processes with ICAO Senior Management, and believe that by working together we can resolve these issues. I would extend the very same challenge to all of you here today, mainly as I know that this improved cooperation and administration would be simple to address while making our work much more streamlined and efficient.
20. Related challenges under the auspices of APANPIRG has been the slow progress on the implementation of ATS infrastructure, and also the delays we've been seeing in AIS-AIM transitions. These are critical improvements to help assure the efficiency of operations in busy sub-regional areas and for enhancing capacity, areas also impacted by your levels of PBN implementation.
21. Important emerging issues such as cybersecurity and UAS/RPAS concerns having been reviewed in helpful details this week. I would also extend our gratitude to those States who proposed some innovative solutions in these areas.
22. Consistent with our ongoing No Country Left Behind objectives, I have been extremely supportive of the APAC Office's Combined Action Teams initiative, which we are considering extending through 2019. It has been well-received by you, and has provided a helpful complement to the technical assistance provided to APAC States under the COSCAP, ASIAP, and SAFE Fund frameworks.

23. I would also wish to mention here the new web based tool recently set out by our Bangkok Office known as 'ADAPT', and which aggregates various assistance and capacity-building resources on a single platform to facilitate your collaboration on related objectives.
24. Finally the meeting received a very comprehensive presentation on technical cooperation and technical assistance opportunities, areas where ICAO is always ready to continue assisting all the states of this region.
25. In closing now dear friends and colleagues, we should all please keep in mind that ICAO will be convening some very important events later this year, on topics and developments that will be truly instrumental to the future of our network.
26. The first of these will be our RPAS Symposium and more especially the Drone Enable event convened immediately after it. States have asked ICAO to assist in determining some global best practices with respect to the domestic air traffic management of unmanned aircraft, for instance pilotless taxis and smaller delivery drones, and this September at ICAO we'll be hearing some exciting proposals from Amazon, Boeing, and many other companies and governments on innovative solutions to this question.
27. Additionally, the 2nd Global Air Navigation Industry Symposium (GANIS), and first ever Safety and Air Navigation Implementation Symposium (SANIS), which are being organized back-to-back this coming 11-15 December, will be essential to defining what some are calling a revolution in airspace management.
28. The results which emerge from these events will closely inform the upcoming agendas of the 13th ICAO Air Navigation Conference in 2018, and the 40th ICAO Assembly in 2019.
29. Also ICAO TCB is organizing the Second Global Aviation Cooperation Symposium, from 11 to 13 October this year, in Athens, Greece. This will be a wonderful opportunity for you to get a first hand knowledge on experiences all over the world on technical cooperation and technical assistance and how to tackle those issues with the assistance of ICAO.
30. Two additional and very important upcoming events for us will be the Third Edition of our ICAO World Aviation Forum, taking place in late November in Abuja, Nigeria – the very first time this event is being held away from our Headquarters – and of course the inaugural Asia-Pacific Ministerial Conference which will be held in early 2018, hosted by China.

31. Before concluding, I would also like to pass along my personal gratitude and commendation to Director Mishra and the entire team at our Bangkok Regional Office for the excellent and innovative preparations and planning which have made this 54th APAC DGCA such a resounding success.
32. And last but not least, I would like to take this opportunity to once again reiterate our tremendous thanks and gratitude to our Mongolian hosts for their outstanding hospitality and excellent arrangements for both our delegates and their spouses.
33. Thank you and wish you a pleasant journey back.

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54TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS

CLOSING SPEECH BY

MR. BYAMBASUREN LUVSANSAMBUU

THE DIRECTOR GENERAL OF
CIVIL AVIATION AUTHORITY OF MONGOLIA

Honorable Dr. Fang Liu - Secretary General of the ICAO,

Dear Mr. Arun Mishra - Director of the ICAO Regional Office

Esteemed Director Generals of the Civil Aviation of the Regional States

Representatives of the Civil Aviation International Organizations

Ladies and Gentlemen,

For the Past 5 days of the Conference, we all enjoyed the great days together as Best friends and as one family of the ICAO.

We are Confident that this Conference had given us the chance to get closer to each other and had empowered our cooperation.

We consider that the 54th DGCA Conference of Asia Pacific Region had successful discussions and sessions under the Theme Topic “*The Challenge of Managing Outcome Focused and Risk Based Regulations for Asia Pacific States*”.

I would like to convey our deep appreciation to Dr. Olumuyiwa Benard Aliu, President of the ICAO Council, Dr. Fang Liu, Secretary General of ICAO, Mr. Arun Mishra, Director of ICAO Asia Pacific Region and all the invited guests for their kindness accepting our invitation.

Ladies and gentlemen,

Let me to wish everybody, presented here, successes in your respectful and high responsible duties. Let the lucky fortunes smile to you and your families. Let's do our best as brothers, sisters and friends.

I would like all of you to accept my sincere gratitude and I believe I will see all of you in FIJI next year.

Thank you

—END—