



**47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions
25 to 29 October 2010
Macao, China**

<http://47dgca.aacm.gov.mo>

REPORT

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

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Macao, China : 25 - 29 October 2010

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PROGRAMME

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PROGRAMME

Registration Day (24 October 2010, Sunday)

- 1700 - 2000 Registration of Conference Delegates
Venue: Level 2, Registration Counter outside Grand Ballroom
- 1700 - 2000 Welcome Reception
Venue: Level 2, Salão do Teatro

Day 1 (25 October 2010, Monday)

- 0800 - 0900 Late Registration of Conference Delegates
Venue: Level 2, Registration Counter outside Grand Ballroom
- 0915 - 0945 Group Photograph Session
Venue: Level 2, Salão do Teatro
- 0945 - 1030 Opening Ceremony
Venue: Level 2, Grand Ballroom
- 1030 - 1130 Coffee Break
- 1130 - 1230 Conference Session
Venue: Level 2, Grand Ballroom
- 1230 - 1400 Lunch
Venue: Level 2, Salão do Teatro
- 1400 - 1530 Conference Session
Venue: Level 2, Grand Ballroom
- 1530 - 1600 Coffee Break
- 1600 - 1700 Conference Session
Venue: Level 2, Grand Ballroom
- 1800 - 2000 Welcome Dinner
Venue: Ground Floor, Outdoor Plaza, Macau Tower Convention and
Entertainment Centre

Day 2 (26 October 2010, Tuesday)

- 0900 - 1030 Conference Session
Venue: Level 2, Grand Ballroom
- 1030 - 1100 Coffee Break
- 1100 - 1230 Conference Session
Venue: Level 2, Grand Ballroom
- 1230 - 1400 Lunch
Venue: Level 2, Salão do Teatro

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1400 - 1530	Conference Session Venue: Level 2, Grand Ballroom
1530 - 1600	Coffee Break
1600 - 1700	Conference Session Venue: Level 2, Grand Ballroom
1800 - 2000	Gala Dinner Venue: Four Seasons Hotel Macao, Cotai Strip

Day 3 (27 October 2010, Wednesday)

0900 - 1030	Conference Session Venue: Level 2, Grand Ballroom
1030 - 1100	Coffee Break
1100 - 1230	Conference Session Venue: Level 2, Grand Ballroom
1230 - 1400	Lunch Venue: Level 2, Salão do Teatro
1400 - 1530	Conference Session Venue: Level 2, Grand Ballroom
1530 - 1600	Coffee Break
1600 - 1700	Conference Session Venue: Level 2, Grand Ballroom

Day 4 (28 October 2010, Thursday)

0830 - 1700	Cultural Tour to Macao
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Day 5 (29 October 2010, Friday)

0900 - 1030	Conference Session Venue: Level 2, Grand Ballroom
1030 - 1100	Coffee Break
1100 - 1200	Closing Ceremony Venue: Level 2, Grand Ballroom
1200 - 1330	Lunch Venue: Level 2, Salão do Teatro

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AGENDA

Macao, China : 25 - 29 October 2010

AGENDA ITEMS

- Agenda Item 1: THEME TOPIC:

*“Through the Turbulence, Working Together for the
Recovery and Enhanced Development of Aviation”*
- Agenda Item 2: REVIEW OF ACTION ITEMS ARISING
FROM THE 46th CONFERENCE
- Agenda Item 3: AIR NAVIGATION PLANNING AND
IMPLEMENTATION
- Agenda Item 4: AVIATION SAFETY
- Agenda Item 5: AVIATION SECURITY
- Agenda Item 6: AIR TRANSPORT
- Agenda Item 7: AVIATION AND ENVIRONMENT
- Agenda Item 8: TECHNICAL AND REGIONAL COOPERATION
- Agenda Item 9: OTHER BUSINESS
- a) Theme Topic for the 48th Conference of DGCA's
 - b) Endorsement of Action Items Arising from
the Present Conference
 - c) Any Other Matter

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OPENING OF THE CONFERENCE

Macao, China : 25 - 29 October 2010

I. OPENING OF THE CONFERENCE

The 47th Conference of Directors General of Civil Aviation (DGCAs), Asia and Pacific Regions was hosted by the Civil Aviation Authority of Macao SAR and was held at the Grand Hyatt Macau, Macao SAR.

The Conference commenced with the official opening ceremony at 1000 hours on Monday, 25 October 2010. It was attended by 253 delegates from 31 States/Administrations and 8 International Organizations including observers.

On behalf of the Government of Macao SAR, the Secretary extended a warm welcome to all delegates for coming to Macao SAR and hoped that the delegates partake of its many benefits and delights and enjoy themselves.

Briefly describing the geography of Macao SAR, the Secretary highlighted that Macao SAR has undergone a phase of tremendous and dramatic development in recent years. Since its return to Chinese sovereignty and with the liberalization of the gaming industry in 2002, Macao SAR has undergone a fundamental transformation and has now become a dynamic tourism and MICE center that attracts both leisure and business travelers from everywhere. Macao SAR enjoys a booming economy. The Closer Economic Partnership Agreement between Macao SAR and mainland China that came into effect in 2004 gives the local companies more business opportunities in the immense Chinese market. In addition, the inscription of the Historic Centre of Macao SAR on the World Heritage List in 2005 has boosted its tourism. Total visitor arrivals reached over 12 million in the first six months of this year, up by 18% year-on-year.

The Secretary stated that in recent years, the provinces and their cities in the Pan Pearl River Delta Region have been making best endeavours to enhance regional integration. It is therefore timely to build a regional integrated transportation system. Quoting the latest financial forecast of the International Air Transport Association, the Secretary acknowledged that the air transport markets have experienced a strong half year growth, reflecting the post recession rebound. The rebound has been strong for Asia-Pacific airlines in cargo markets and revenues. Although air travel growth rate will slow down during the rest of the year, the Asia-Pacific airlines are still expected to report a year-round growth of 6.3% in 2010 and generate the highest profits than airlines in other regions of the world. As a counterpart in the Asia Pacific Region, Macao SAR wished to benefit from the economy upturn.

Speaking of aviation in Macao SAR, he stated that it is relatively new compared to the development of the industry in other countries. Dating back to the 80s, as the territory progressed into a rapidly developing region in Pearl River Delta, Macao SAR saw the need to open itself to modernity and integrate with the globalization process.

Macao SAR has adopted open skies policies that keep its air transport up to date in a constantly developing market. The Secretary proudly stated that Macao SAR adopts the most liberal criterion listed by International Civil Aviation Organization and with the continuous support from the Chinese Central Government on the air transport policies between Macao SAR and the mainland, its trade and commerce has been growing remarkably well.

Highlighting the importance of stable markets and a reliable economic framework, the Secretary stressed that while Macao SAR will facilitate healthy development of the industry it will never compromise on enforcing regulations. The results of Macao SAR's participation in the Universal Safety Oversight Audit and the Universal Security Audit

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Programmes respectively proved that Macao SAR's safety oversight work is in compliance with the Standards and Recommended practices of International Civil Aviation Organization. Its lack of effective implementation was far below the global average. Macao SAR's ultimate wish is to carry out regulatory responsibilities effectively while working with the operators to develop the industry in a healthy, regulated, professional and sustainable direction.

On the importance of regional cooperation the Secretary spoke of Macao SAR's participation in COSCAP, CAPSCA and the mutual acceptance arrangements with Mainland China and Hong Kong SAR for Approval of Aircraft Maintenance Organizations and Airworthiness Certification. Macao SAR has also signed protocols with mainland China and France on investigation of aircraft accident and incident. These cooperative efforts have allowed Macao SAR to share resources and experiences with other States or Administrations and further enhance its capacity to carry out oversight work. The Secretary stressed on the need to work hand in hand to promote sustained growth for the civil aviation systems.

The Secretary expressed his gratitude to the International Civil Aviation Organization for its efforts in achieving safety in the global aviation market.

The Secretary thanked the supporting entities of the Conference and the people working behind the scene to make this event possible and smooth.

In conclusion the Secretary wished the 47th DGCA every success.

The full text of the Welcome Address of the Secretary for Transport and Public Works of Macao SAR is included as **Attachment 1** to this report.

In his address, the President of the Council of ICAO, Mr. Roberto Kobeh González thanked the Civil Aviation Authority of Macao SAR for hosting the Conference. He expressed his delight at being able to attend the 47th Conference of Directors General of Civil Aviation of the Asia and Pacific Regions.

On behalf of ICAO, the President ICAO Council, Mr. Roberto Kobeh González thanked the Government of Macao SAR for hosting the Conference. The President stated that the Conference was taking place at a time when the global airline industry is showing positive signs after going through the worst 18 months in its history. He noted that the traffic for Asia/Pacific airlines was expected to grow considerably faster than the global average and was pleased to note that recovery is under way; and that the theme of the Conference – *“Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation,”* definitely pointed the way of maintaining the momentum.

In his address the President briefly touched upon key issues like safety, security and environment which had a global impact. On safety, the President highlighted that one of the challenges faced is to further improve aviation safety. He asked the Conference to take into account the outcome of the 37th Session of the ICAO Assembly, including the adoption of a comprehensive safety strategy based on transparency and the greater sharing of safety information. Adapting this approach would enhance harmonization with the global ICAO safety strategy.

On security, the President informed that the recent Assembly made significant progress when it adopted a Declaration on Aviation Security. It reaffirms the international commitment to enhance aviation security collaboratively and proactively through a number of ways. The Assembly also fully supported a new ICAO aviation security strategy.

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Speaking on environment, the President was pleased that the Assembly adopted a historic resolution making ICAO the first United Nations agency to lead a sector in the establishment of a globally harmonized agreement for addressing its CO₂ emissions.

The President also highlighted a few issues of particular interest to the Asia Pacific region.

He recalled the comment he made at the 46th DGCA Conference: *“There is no doubt that a seamless sky is fundamental to the safe and orderly growth of air transport in the Asia and Pacific Regions, as it is in all other regions.”* He was happy to observe that as a result of an Action Item arising from the previous Conference, the Region has been actively pursuing the objective of a seamless sky in air traffic management and that a workshop on that subject is planned for early next year. The Council President assured the Conference that ICAO will be always prepared to provide any guidance that may be sought in order to turn the vision of a global seamless system into reality. On Performance Based Navigation, the President was pleased to learn that following the establishment of the Flight Procedure Programme Office in Beijing, sixteen of the APAC States were participating in the Programme. He encouraged the remaining States to take full advantage of this facility within the Region.

The President suggested that an initiative that can speed progress is the introduction of regional aviation safety groups. He informed the Conference that the ICAO Council approved the establishment of these groups in May 2009, with the aim of supporting a regional performance framework for the management of safety. The expectation was that this would create both the awareness of regional safety issues and a mechanism for addressing them, without fundamentally affecting the efforts that are presently underway in several ICAO regions.

Briefly pointing to the Assembly’s endorsement of ICAO’s future work on liberalization, the President stated that the Assembly reaffirmed that the Organization should continue to exercise its leadership role in facilitating and assisting States in the liberalization of international air transport.

In conclusion, the President emphasized that whether we are talking about aviation safety, seamless skies or any other aspect of international civil aviation, the key to success and progress is cooperation; and suggested that this be the guiding principle on which this Conference should unfold.

The full text of the Address by the President of the Council of ICAO is included as **Attachment 2** to this report.

Mr. Mokhtar A. Awan, Regional Director, ICAO Asia Pacific Office welcomed the dignitaries and the delegates to the 47th DGCA Conference in Macao SAR.

In his opening remarks, the Regional Director, expressed his gratitude and commended the Civil Aviation Authority of Macao SAR and the Government of Macao SAR for the excellent hospitality and arrangements made to receive the delegates; and for the meticulous planning and preparations for the 47th Conference. The Regional Director specially thanked the honorable Chief Executive of Macao SAR, Dr. Fernando Chui for sparing time and making it convenient to grace the occasion. The Regional Director also thanked the President of the ICAO Council Mr. Roberto Kobeh González who kindly joined this important regional Conference of the Directors General. He further extended a very warm welcome to the Directors General and Chief Executives of various Civil Aviation Administrations who were participating in the Conference for the first time and these included DGCA’s from Bangladesh; Mongolia; Nepal; Philippines and the Republic of Korea.

The Regional Director was confident that the 47th Conference of the Directors General, which was preceded by the recently concluded 37th Session of the ICAO Assembly, will play a pivotal role in not only charting out a harmonized strategy at the regional (Asia/Pacific) level to ensure effective and timely implementation of the various Assembly Resolutions, but also give meaningful direction to address issues confronting Asia Pacific region, in particular during a difficult period in the history of aviation.

Briefly highlighting the progress achieved in some of the areas since the last DGCA Conference, which included ATM, the Regional Director drew the attention of the Conference to persistent examples of RVSM non-approved flights “incorrectly” filing flight plans showing RVSM approval in Field 10; and Large Height Deviations (LHD) that continue. He urged the Directors General to institute measures to address the related problems.

The Conference was also informed of the progress made on Seamless Sky. To extend knowledge about ICAO Global ATM Operational Concept and the future ATM visions, a two-day workshop was planned in Tokyo in February 2011 on the future air traffic systems, to be followed by a one-day Ad-Working Group meeting to discuss the outcomes from the workshop and chart a clear vision for seamless sky in the APAC region. The Regional Director thanked JCAB and FAA for the initiative.

On the implementation of Performance Based Navigation the Conference was advised that not all States have developed their PBN Implementation Plan. The 21 State Plans that were submitted to the ICAO APAC Office were reviewed by a team of experts. A report on the review has been/will be provided to the respective States. He urged the remaining States / Administrations to develop and submit their plans at the earliest. Another area of concern is that only 28 of the 40 States in the region have nominated their PBN Focal Points.

Considerable work has been done in the implementation of new ADS-B surveillance technology. APAC States have been cooperating on related data sharing and the updating of trunk circuits for applicable ground-to-ground networks to ensure effective information flows between States and neighboring Regions

The Regional Director drew the attention of the Conference to comprehensive changes to the ICAO Flight Plan and associated ATS Messages formats. He encouraged States to use the available guidance material and institute adequate measures to ensure compliance by the due date in 15 November 2012. He urged the States to keep the ICAO Flight Plan Implementation Tracking System (FITS) website updated.

He briefly touched upon the improvement in the provision of meteorology for international aviation in the Asia/Pacific region during the past year.

The Regional Director stressed that ultimately the successful implementation of a global air navigation system depends on cooperation among all members of the civil aviation community.

The Conference was informed that in the coming cycle the Organization is poised towards providing a sharper focus on three strategic areas, namely: safety; security; and environmental protection and sustainable development of international civil aviation. The work of the Organization will remain focused and relevant to the existing and emerging needs of the air transport industry so that its member States could implement the ICAO provisions. The Regional Office as such has aligned its work programme to the three core objectives and has developed its programmes /projects accordingly.

Another core issue of relevance is Training. ICAO has initiated work to develop policies to ensure that enough competent personnel are available to manage, operate and maintain the global air transportation system of the future.

The Regional Director commended all States/Administrations that in keeping with Safety Target Levels as stipulated in the Global Aviation safety Plan (GASP), the Asia Pacific region has successfully kept the accident rate below the global average. He, however, put in a word of caution that while the Asia Pacific Accident Rate is below/near the global average, but there is a visible upward trend. Concerted efforts will need to be instituted to arrest the upward trend and ensure that the APAC region achieves significant reduction in the accident rate. In addition, the number of fatal accidents and related fatalities will have to be brought down in keeping with the public perception of aviation being the safest mode of transportation.

Some other significant developments include the decision of the Council to move ahead with the Continuous Monitoring Approach (CMA) and the Regional Aviation Safety Groups (RASG). These have also been duly endorsed by the 37th Assembly. The Regional Aviation Safety Group-APAC (RASG-APAC) aims at supporting a regional performance framework for the management of safety. The establishment of RASG will create both the awareness of regional safety issues and a mechanism for addressing them.

Like other ICAO regions, the APAC region also needs some form of a safety oversight mechanism like the Regional Safety Oversight Organization (RSOO). The establishment of an RSOO has been the crying need of some States that for various reasons are unable to have in place an adequate safety oversight organization.

Speaking on security issues, the Regional Director recalled that the 33rd ICAO Assembly in 2001 stipulated the need for a regional aviation security programme. CASP-AP, which is a regional cooperative AVSEC Programme, was established in 2005 and is open to all Asia Pacific States. The primary objective of this programme is to assist member States to comply with the SARPs and enhance security capabilities. As of date, 25 member States have joined the CASP-AP and have accrued significant benefits.

In conclusion, the Regional Director once again thanked the Government of Macao SAR and the Civil Aviation Authority, Macao SAR for their excellent efforts and efficient management of the Conference.

He wished the delegates the very best and looked forward to their contribution to the success of the Conference.

The full text of the ICAO Regional Director's Opening Remarks speech is included as **Attachment 3** to this report.

II. COMMENCEMENT OF CONFERENCE SESSIONS

The first working session of the Conference commenced at 1200 hours on Monday, 25 October 2010. The ICAO Regional Director, Mr. Mokhtar A. Awan, as Secretary of the Conference, once again welcomed all participants to the 47th Conference of Directors General of Civil Aviation, Asia and Pacific Regions. He drew attention to the salient features of the Conference procedures and highlighted the important issues before it.

III. ELECTION OF CHAIRPERSON

The ICAO Regional Director called for nominations for a Chairperson of the Conference. The Head of Delegation from Japan, Mr. Hiroshi NARAHIRA, Deputy Director-General, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism proposed Mr. Simon Chan Wang Hong, President, Civil Aviation Authority of Macao SAR to be the Chairperson of the 47th Conference of Directors General of Civil Aviation, Asia and Pacific Regions. He provided a brief resume of Mr. Chan's illustrious career achievements and wide ranging experience and expressed confidence that Mr. Chan would provide able leadership to the Conference. The Head of Delegation from Thailand, Mr. Sumpun Pongthai, Director of Flight Standards Bureau, Department of Civil Aviation, Thailand, seconded the nomination.

Mr. Simon Chan Wang Hong 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 the People's Republic of China, Mr. Xinghua XIA, Deputy Administrator Civil Aviation Administration of China (CAAC) proposed Mr. Christian Assailly, Director of Civil Aviation, Department of Civil Aviation, New Caledonia for the position. This was supported by the Head of Delegation from the Republic of Korea, Mr. Soo-Kon KIM, Director General for Aviation Safety Policy Bureau, Office of Civil Aviation, Ministry of Land, Transport and Maritime Affairs. Mr. Assailly was unanimously elected as Vice-Chairperson of the Conference.

Mr. Christian Assailly thanked the delegates for the honour bestowed on him. Mr. Assailly informed the Conference of New Caledonia's intent to host the 48th DGCA Conference in New Caledonia in 2011. He extended an invitation to all States/Administrations in the APAC region and the International Organizations to the 48th DGCA Conference in New Caledonia.

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.

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VI. APPOINTMENT OF MODERATORS

The Chairperson advised the Conference that the following delegates had kindly agreed to moderate the respective Agenda Items:

SUBJECT	AGENDA ITEM	MODERATOR
Theme Topic	1	Dato' Azharuddin Abdul Rahman Director General Department of Civil Aviation, Malaysia
Review of Action Items arising from the 46 th Conference	2	Mr. Ram Prasad Neupane Director General Civil Aviation Authority of Nepal
Air Navigation Planning and Implementation	3	Mr. Norman Lo Director-General of Civil Aviation Civil Aviation Department, Hong Kong, China
Aviation Safety	4	Mr. John McCormick Director of Aviation Safety Civil Aviation Safety Authority, Australia
Aviation Security	5	Mr. Steve Douglas Director of Civil Aviation Civil Aviation Authority of New Zealand
Air Transport	6	Mr. Alfonso G. Cusi Director General Civil Aviation Authority of the Philippines
Aviation and Environment	7	Mr. Yap Ong Heng Director General of Civil Aviation Civil Aviation Authority of Singapore
Technical and Regional Cooperation	8	Mr. Herry Bakti Singayuda Gumai Director General of Civil Aviation Directorate General of Civil Aviation, Indonesia
Other Business	9	Air Cdre. Mahmud Hussain, ndu, psc. Chairman Civil Aviation Authority of Bangladesh
a) Theme Topic for the 48 th Conference of DGCA's		
b) Endorsement of Action Items Arising from the Present Conference		
c) Any Other Matter		

VII. EXPLANATION OF THE WORK PROGRAMME

The 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.

AGENDA ITEM 1

THEME TOPIC:

“Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation”

AGENDA ITEM 1: THEME TOPIC:

“Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation”

**Moderator: Dato’ Azharuddin Abdul Rahman
Director General of Civil Aviation
Malaysia**

1.1 In introducing the Agenda Item, the Moderator stated that from the Theme Topic “Seamless Skies” of the 46th DGCA Conference we now moved to “Through the Turbulence, Working Together for Recovery and Enhanced Development in Aviation”, the Theme Topic for 47th DGCA Conference. He acknowledged that the Theme Song “We’ll fly” has set the tempo for this year Conference deliberations.

1.1.1 The Moderator stressed that the Global Civil Aviation Industry has had turbulence of 18 months due to fuel crisis and economic crisis among others. Whilst the industry was almost on the way to stabilize in the 4th quarter of 2009, the aviation world was confronted with the 25 December 2009 security breach, i.e. attempting to ignite a bomb on board a flight from Europe to USA. Subsequently, the unprecedented volcanic ash disruptions in the 1st quarter of 2010 had its own ramifications. Despite the downturn and disruptions people still want to fly, as the demand forecast a 6.4% and 4.9% global growth for the year 2010, 2011 and 2012 respectively. Demand for passenger travel in the Asia Pacific Regions is forecasted to be highest i.e. 10.8%, 7.5% and 7.5% increase for the years 2010, 2011 and 2012 respectively.

1.1.2 In anticipation of the growth, airlines procured new aircraft. Consequently, airlines have placed passenger conveniences and comfort back in the cabin, i.e. new materials, layout and technological break through as amplified in the “Dreamliner” B787 design. The low cost carriers with their own branding and business model have changed the landscape of air travel. This has forced legacy airlines to change or re-model their business plans. Passengers are now demanding more efficient, simpler and faster travel formalities at airports, despite the increase in aviation security measures, i.e. AGs.

1.1.3 In the late 1980s and early 1990s the aviation industry braced itself for reduction in air travel due to conveniences and advancement in IT communication in the form of internet, e-mails and teleconferencing. However, airlines, especially the LCC have capitalized the IT to their advantage by introducing e-ticketing, on line booking, on line check-in, which makes it easier and convenient for the passenger to travel by air. He stressed that the regulators and practitioners of civil aviation have therefore to work together through the turbulence for the recovery and for the enhancement of aviation development.

1.2 Two (2) Discussions Papers and One (1) Information Paper were received under this Agenda Item. The following two Discussion Papers were presented :

REF.	TITLE	PRESENTED BY
DP/1/1	Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation	ICAO
DP/1/3	Working Together for the Recovery and Enhanced Development of Aviation	Macao, China

**1.3 DP/1/1 THROUGH THE TURBULENCE, WORKING TOGETHER
FOR THE RECOVERY AND ENHANCED DEVELOPMENT
OF AVIATION**

1.3.1 The paper presented by the ICAO Secretariat aims to review the global crisis and its impact on the region; and suggests how the APAC region can cooperate and work together to meet the challenges facing the aviation sector. In the last couple of years the world economy faced an unprecedented period, which impacted among others, the air transport and tourism industry. In addition, the increased fuel prices and the spread of pandemic diseases through air travel had a negative impact on the growth of air traffic. The world economy started to recover towards the end of 2009 and is expected to grow by over 4% this year. The APAC region is expected to grow by over seven percent this year. The world's future prosperity may depend on a growing and thriving aviation industry which currently supports nearly eight percent of the world's economy. The greatest demand for passenger aircraft will be from airlines in the APAC and emerging markets. Increased aviation activity has already brought major challenges to the fore. Sustained increase in aircraft movement has also placed considerable pressure on air space management. Addressing the challenges and preparing for a new era will require bold and aggressive decisions.

**1.4 DP/1/3 WORKING TOGETHER FOR THE RECOVERY AND
ENHANCED DEVELOPMENT OF AVIATION**

1.4.1 This paper presented by Macao SAR highlights the recovery of the aviation industry after the economic crisis in 2008 and the potentials of the Asia Pacific Region in the development of aviation. In order to cope with the increasing global need of air travel and face the challenges ahead, cooperation and partnership are important to enhance the development of the aviation industry in the Asia Pacific.

1.4.2 In order to enhance the development of aviation, aviation safety is and will always be foundational and crucial concern in the safe and orderly development of aviation industry. Regional dialogue must be enhanced and the regions must work together to build a stronger security net as technology development posts new threats. On the other hand, new technology also helps to counter these threats.

1.4.3 Further, regional coordination is required for future air traffic management system in order to cope with the increasing demand for airspace capacity and operational efficiency. To assure confidence of the travelling public and ensure that aviation remains competitive when compared to other fast developing transportation industries, minimum protection should be offered to the passengers by the air operators when flights are disrupted. This requirement should be regulated.

1.4.4 The aviation industry is working hard to reduce the adverse impact on the environment while maintaining growth. It is a common goal to increase efficiency by adopting new technologies to reach the target of carbon-neutral growth from 2020 and a 60% improvement in fuel efficiency of aircraft involved in international aviation by the year 2050 with 2005 as the base level.

1.4.5 To move forward, all the aviation industry stakeholders need to be involved and work together to enhance the development of aviation. Macao SAR China proposes to discuss the above subjects and issue a joint statement relating to aviation safety, security, efficiency and sustainability to show the Outcome of the 47th DGCA Conference.

1.5 DISCUSSIONS ON THE PAPERS PRESENTED

1.5.1 In support of DP/1/1, India agrees that air transport is growing at a rapid rate in the Asia Pacific and there are challenges ahead in safety, ATM, efficiency and infrastructure for the region. There is a need for greater cooperation among the States and stakeholders and India is committed to work together with all stakeholders.

1.5.2 Republic of Korea described DP/1/1 as an excellent theme paper and noted volcanic ash as an example of an emerging threat. Republic of Korea while supporting the paper said it is important to develop a systematic and pragmatic approach.

1.5.3 IATA thanked the Civil Aviation Authority of Macao SAR, President of ICAO Council and Regional Director, ICAO APAC Office for the excellent organization. IATA stated that it represents over 230 international airlines and its attendance bring to this Conference the aspirations of these global airlines. IATA reaffirms that the Asia Pacific is the largest and the fastest growing aviation market. Although the theme of the conference was agreed when the Industry was at a low ebb – it is now recovering, faster in Asia than elsewhere. However, the central core of the theme which is “working together” remains relevant the future of the industry is dependent on such conference deliberations. Some key issues that will need to be addressed are air traffic control planning and the Asian skies of the future in a global context; massive growth in air traffic in China and India; and safety issues in developing nations where infrastructure is still fragile.

1.5.4 IATA is therefore committed to work together with the States to overcome the challenges. Of particular importance to the airline industry is the extent of agreement that can be reached on further liberalization of the Industry, how we can make flying safer, more secure, more efficient and also protect the environment so that industry can continue to contribute to the economic growth of Asia.

1.5.5 IATA complimented the ICAO Secretariat for a comprehensive recapitulation of the APAC air transport system in its Discussion Paper.

1.5.6 Commenting on DP/1/3, India congratulated Macao SAR on the initiative and suggested that the statement can be strengthened with additional input from the forthcoming deliberations.

1.6 SUMMATION BY THE MODERATOR

1.6.1 In summarising the session, the Moderator remarked that the Discussion Paper presented by the ICAO Secretariat walked us through the subject. It provided a brief review of the global crisis and its impact on the region.

1.6.2 The Discussion Paper presented by Macao SAR urged stronger cooperation with a proposed adoption of a “joint statement”. Referring to the Information Paper submitted by France, the Moderator drew the attention of the Conference to the European experience and profitability severely impacted the air transport industry.

1.6.3 The Moderator listed the general consensus reached by the Conference:

- a) The Conference noted/agreed that, Asia and Pacific Regions:
 - are forecasted to have the highest growth in civil aviation; and

- should continually work together for the enhancement of aviation development.
- b) However, there are challengers, therefore, it was suggested:
 - to enhance ATM efficiency through air space optimization, in particular volcanic ash problem which is an emerging threat;
 - there is need for a regional mechanism dedicated to safety matters, and need to review the GASP for a better and more efficient implementation by States; and
 - there is need to develop a more systematic and pragmatic safety enhancement framework beyond USOAP comprehensive system approach.

1.6.4 States in principle agreed to the Joint Statement proposed by Macao SAR. However, it needed further refinement. The Conference welcomed any comment, proposal, addition and amendment to the Statement. All States were requested to provide their comments in writing to the Macao SAR delegation by lunch time Wednesday, 27 October 2010.

1.6.5 The Paper also suggested how the APAC region could cooperate and work together to meet the challenges.

1.7 MACAO STATEMENT

1.7.1 Discussion was continued under Agenda Item 1 on the third day of the Conference.

1.7.2 Based on the input received from delegates, Macao SAR redrafted the Macao Statement and put it up for consideration by the Conference.

1.7.3 After due deliberation and amendments suggested to the document, the Conference agreed with the final drafted version.

1.7.4 The final version of the Macao Statement is at **Attachment 4**.

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

AGENDA ITEM 2

REVIEW OF ACTION ITEMS ARISING FROM THE 46th CONFERENCE

Macao, China : 25 - 29 October 2010

**AGENDA ITEM 2: REVIEW OF ACTION ITEMS ARISING FROM
THE 46th CONFERENCE**

**Moderator: Mr. Ram Prasad Neupane
Director General
Civil Aviation Authority of Nepal**

2.1 Three (3) Discussion Papers and two (2) Information Papers were received under this Agenda Item. The following three (3) Discussion Papers were presented:

REF.	TITLE	PRESENTED BY
DP/2/1	Responses from Administrations to Action Items Arising from the 46 th Conference of Directors General of Civil Aviation, Asia and Pacific Regions	ICAO
DP/2/2	ICAO on Seamless Sky - ATM	ICAO
DP/2/4	Update on the Asia Pacific Consultative Link (APCL)	Singapore

2.2 DP/2/1 REPORT ON RESPONSES TO ACTION ITEMS ARISING FROM THE 46th CONFERENCE OF THE DIRECTORS GENERAL OF CIVIL AVIATION, ASIA AND PACIFIC REGIONS

2.2.1 The ICAO Secretariat Paper provides details of the actions taken by various States/Administrations on the Action Items arising from the 46th Conference of DGCA's. Each Action Item was dealt with in a Power-Point presentation with the latest updates and developments provided by the States/Administrations and /or actions taken by ICAO were explained.

2.2.2 The attention of the delegates was drawn to deliberations from the 46th DGCA Conference wherein the Conference requested Directors General to provide to the ICAO Regional Office a summary of the actions taken, within six months of the Conference, and to provide a follow-up report at least two months prior to the next Conference.

2.2.3 The Conference was informed that at the time of finalizing the paper on 8 October 2010 responses had been received from only seventeen (17) Administrations. This constituted less than fifty percent of the States/Administrations that the Asia /Pacific Office is accredited to. The level of implementation by Administrations was evaluated on the basis of the seventeen replies received. An additional seven (7) States provided their responses either prior to the Conference or during the course of the Conference. The Conference was also informed that a review of the responses received over the past five years indicated that hardly fifty percent of the States/Administrations forwarded their responses to the List of Action Items. In addition, seventeen (17) have never responded in the last five years. As such, any analysis would not be a pragmatic representation of the level of implementation at the regional level.

2.2.4 The Administrations that replied, supported the Action Items arising out of the 46th Conference, with most having implemented a majority of the Action Items or indicating plans to do so.

2.3 DP/2/2 ICAO ON SEAMLESS SKY – ATM

2.3.1 The Paper on ICAO Seamless Sky – ATM was presented by the ICAO Secretariat. The Paper states that as the first step towards a Seamless Sky, it is considered important to extend knowledge about the ICAO Global ATM Operational Concept and the future ATM projects such as the United States' Next Generation Air Transportation System (NextGen), Europe's Single European Sky ATM Research (SESAR) Programme and Japan's Collaborative Actions for Renovation of Air Traffic Systems (CARATS). To achieve this objective, the Japan Civil Aviation Bureau (JCAB) and the United States Federal Aviation Administration (FAA) propose to hold a workshop in early 2011 on the future air traffic systems in collaboration with the ICAO Asia and Pacific Office. The 21st Meeting of APANPIRG (APANPIRG/21, September 2010) thanked Japan and the United States for the important initiative for the region and adopted Conclusion 21/8 – ICAO Asia/Pacific Seamless ATM Workshop.

2.3.2 The Paper stresses that discussion on seamless ATM of Asia and Pacific Regions may require a series of intensive meetings which will require resource and time. As such States and ICAO Asia and Pacific Office need to consider the appropriate discussion platform under APANPIRG, taking into consideration the available resources and clarifying the demarcation between existing and new meetings.

2.3.3 APANPIRG currently has three sub-group level meetings, namely, ATM/AIS/SAR/SG, the Regional Airspace Safety Monitoring Advisory Group, and CNS/MET/SG. Under the sub-groups, several contributing bodies such as task forces are established to discuss issues in more detail. Recognizing the role of the existing groups, Japan suggested three options for consideration.

2.3.4 The first option is to use an existing sub-group for the discussion on future ATM. In this case, Japan considers that the ATM/AIS/SAR/SG is the appropriate body for this purpose. The second option is to establish a new sub-group for the discussion on future ATM system. The third option was to discuss future ATM system on an ad-hoc basis.

2.3.5 With regard to the three proposals suggested by Japan, the Chairman of ATM/AIS/SAR/SG was the view that Seamless Sky should be addressed in a holistic manner, taking into account all areas such as meteorology, aerodrome facilities, CNS and ATM. Singapore supports this view.

2.3.6 Japan expressed the view that possibly the third option to have an ad-hoc meeting could be the best way forward. Australia supports Japan's view of the ad-hoc meeting as a way to look at the present initiatives. Similarly, India and IATA support the ad-hoc meeting arrangement as well.

2.3.7 APANPIRG/21 agreed to the proposed ad-hoc meeting arrangement. The Secretariat suggested that the first meeting could be held with the Seamless ATM Workshop in February 2011. The meeting formulated Conclusion 21/12 – Convening of the Seamless ATM Ad-Hoc Meeting.

**2.4 DP/2/4 UPDATE ON THE ASIA PACIFIC CONSULTATIVE LINK
(APCL)**

2.4.1 Singapore presented this Paper. The Asia Pacific Consultative Link (APCL) was set up as a mechanism to facilitate communication among the DGCA's and the Group of Asia and Pacific States on the Council of ICAO ("Montreal Group"), and serve as a platform to promote consensus on key aviation issues. The APCL was re-vamped in 2009 with the assistance and cooperation of various stakeholders. The Paper proposes a systematic process for the dissemination of information from the Montreal Group to States / Administrations via the APCL; increasing participation in the APCL by providing access to more users from the Asia and Pacific States and the Asia Pacific Air Navigation Commissioners; and the schedule of topics for 2010/2011.

2.5 DISCUSSIONS ON THE PAPERS PRESENTED

2.5.1 The Secretariat while commenting on the responses from States/ Administrations to Action Items arising from the 46th Conference stressed that it is 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 Secretariat invited the Conference to review the information provided by the States/ Administrations on the follow-up of the Action Items and urged to take action as deemed necessary.

2.5.2 Referencing to the Agenda Item 46/11, Republic of Korea commented that it has developed safety tools in electronic form for non-commercial purpose and informed the States that it can be made available through technical cooperation arrangements. The software is developed to assist the safety oversight system. He pointed out that detail information is available in IP/4/29 on Utilization of Electronic Tools for Safety Management in Response to ICAO's New Safety Strategy.

2.5.3 The Moderator commented that ICAO has taken initiative to step forward the seamless sky and mentioned that it was discussed in the APANPIRG/21. He invited the Conference to note the APANPIRG/21 – formulated Conclusion 21/18 regarding ICAO APAC Seamless ATM Workshop and Conclusion 21/12 on the convening of Seamless ATM Ad-hoc meeting to move forward with the spirit of establishing the seamless ATM in APAC Region.

2.5.4 Japan supported the seamless ATM concept and informed that Seamless ATM workshop will be held in 23-24 February and a wrap up meeting will be on 25 February 2011. Points were raised about existing ATM sub-group, new sub-group and future ATM ad-hoc basis.

2.5.5 Singapore supported initiative of the APAC Regional Office and suggested it would be better to greater clarity regarding the formation and the TOR of the Seamless ATM ad-hoc group.

2.5.6 Hong Kong SAR supported the seamless ATM concept and expressed similar views as Singapore as regards to the formation of group.

2.5.7 Republic of Korea pointed out the importance of Global ATM in Seamless Sky and ATS route restructuring.

2.5.8 India complemented the initiatives of ICAO APAC on Seamless ATM and formation of group of ad-hoc meeting. It will be a step forward for the efficiency and sustainability of air transport.

2.5.9 It was generally acknowledged that APCL was set up as a mechanism to facilitate communication among the DGCA's and with the Group of Asia and Pacific States on the Council of ICAO ("Montreal Group") and a platform to promote consensus on key aviation issues.

2.5.10 Republic of Korea, Fiji and Singapore supported the role of APCL.

2.6 SUMMATION BY THE MODERATOR

2.6.1 At the outset, the Moderator thanked the Chairman and the ICAO Secretariat for providing him the opportunity to serve as the Moderator to this particular Agenda Item. He briefly recapitulated the 12 Action Items agreed by the 46th Conference held last year in Osaka, Japan. Despite reminders from ICAO APAC Office the response from the States/Administrations was not very encouraging as less than 50 percent reported their response.

2.6.2 The Moderator thanked the ICAO Secretariat for its persuasion in activating the States on the implementation of Action Items and reporting system of the progress made by the States. Stressing the need to comply with the agreed timeline in submitting the progress and follow-up report within the given timeline, the Moderator urged States /Administrations to strictly adhere to the same and maintain a reporting culture. He mentioned that the Action Items relating to Seamless Sky/ATM concept, restructuring of route, language proficiency requirements, implementations of ICAO Audit findings, enhancement of safety and security through Continuous Monitoring Approach (CMA) are still valid and with deliberations in the respective Agenda/sessions, it will be considered for appropriate formulation in the relevant Action Items as appropriate.

2.6.3 The Moderator concluded the session with appreciation to the Chairman for the outstanding arrangements and expressed sincere thanks to the presenters and the delegates for their lively discussion and active participation.

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

AGENDA ITEM 3

**AIR NAVIGATION PLANNING AND
IMPLEMENTATION**

Macao, China : 25 - 29 October 2010

AGENDA ITEM 3: AIR NAVIGATION PLANNING AND IMPLEMENTATION

Moderator: Mr. Norman Lo
Director-General of Civil Aviation
Civil Aviation Department, Hong Kong, China

3.1 Thirteen (13) Discussion Papers and twenty one (21) Information Papers were received under this Agenda Item. The following thirteen (13) Discussion Papers were presented:

REF.	TITLE	PRESENTED BY
DP/3/1	APANPIRG Activities - Outcomes of APANPIRG/21	ICAO
DP/3/2	Review Outcomes of APANPIRG/21 on the Implementation of the New Flight Plan Format	ICAO
DP/3/10	An Update on ADS-B Implementation in the South China Sea	CANSO
DP/3/11	CANSO's Seamless Airspace Guidance Document	CANSO
DP/3/12	Promoting ATM Industry Best Practices in the Asia Pacific Region	CANSO
DP/3/13	New Meteorological Services Supporting Air Traffic Management	Hong Kong, China
DP/3/14	PBN Development in Hong Kong, China	Hong Kong, China
DP/3/19	Regional ATM Contingency Plan	Singapore
DP/3/21	Development of Action Items for Transition from AIS to AIM	Republic of Korea
DP/3/22	Performance Based Navigation (PBN) Implementation Status in Nepal	Nepal
DP/3/24	Status of PBN Implementation in the Asia Pacific Region	ICAO
DP/3/25	Civil/Military Co-ordination	ICAO
DP/3/26	Delay in GNSS Implementation	ICAO

3.2 DP/3/1 APANPIRG ACTIVITIES - OUTCOMES OF APANPIRG/21

3.2.1 This paper was presented by the ICAO Secretariat. The Twenty First Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/21) was held in Bangkok from 6 to 10 September 2010 at the ICAO Regional Office. The meeting was attended by 114 participants from 23 Member States and 3 International Organizations (CANSO, IACA, and IATA). APANPIRG/21 adopted 49 Conclusions and 10 Decisions. The meeting report is available on the regional office web site: www.bangkok.icao.int under the menu item "APANPIRG and subgroups" (the username and password have been provided to all civil aviation administrations in the region).

3.2.2
below:

The key technical and operational outcomes of APANPIRG/21 are shown

- 1) Invited ICAO to develop a common set of performance metrics for all ICAO regions so as to facilitate comparative analysis of regional developments of air navigation infrastructure.
- 2) Adopted the Asia/Pacific Guidance Material for the Implementation of Amendment 1 to the fifteenth edition of the *Procedures for Air Navigation Services – Air Traffic Management*. Called on ICAO to continue with interregional coordination for ensuring implementation of a new flight plan format by 15 November 2012.
- 3) Approved the China RMA as an Asia/Pacific RVSM Regional Monitoring Agency (RMA) with responsibility for all RVSM airspace in China FIRs and the Pyongyang FIR.
- 4) Invited ICAO to organise the Asia and Pacific seamless ATM workshop in early 2011 and urged States and other interested parties to foster discussion and action for the Asia and Pacific States in the planning of the future ATM system.
- 5) Adopted a revised strategy for implementation of ATN in the Asia/Pacific Region.
- 6) Invited ICAO to consider a global IPv6 addressing scheme for ground-ground communication.
- 7) Urged States, which have not developed their State PBN Implementation Plans to develop the plan in accordance with the Asia/Pacific Regional PBN Implementation Plan. Invited ICAO to consider establishing regional development and implementation teams, similar to ICAO/IATA global GO teams, to assist States for expediting PBN implementation. Urged States to share the impediments in PBN implementation with ICAO APAC office and agreed for the continuation of PBN Task Force.
- 8) Adopted the revised regional surveillance strategy for Asia and Pacific Regions.
- 9) Urged States to have a designated contact person closely involved in the preparatory work for WRC–2012 and invited States to support the ICAO position at WRC–2012.
- 10) Noted the slow progress of implementation of GNSS in the Region. Informed States about the availability of GNSS Manual (rev 1) on ICAO web site: <http://www.icao.int/icaonet> . Revision 2 of the manual which provides guidance on how to deal with the identified hurdles is expected to be available by year end.
- 11) Agreed to conduct coordinated ionospheric measurement campaign through points of contact nominated by States.

- 12) Adopted the sample template for promulgation of ADS-B Avionics Equipage requirement, guidelines for airworthiness and operational approval and appreciated the ADS-B planning and implementation status in States.
- 13) Invited the ISCS Provider States and the Asia and Pacific Regional Office, to work with other States so as to assist with the implementation of the World Area Forecast System Internet File Service (WIFS) by March 2012.
- 14) Invited ICAO to consider updating the cost recovery guidance material that would take into account States whose air traffic volume is not sufficient in obtaining the cost recovery for the necessary MET services required in Annex 3.
- 15) Urged States to continue to consider environmental issues in the planning and implementation of regional air navigation systems.
- 16) Adopted the revised terms of reference of APANPIRG as a result of the establishment of RASG–APAC [Regional Aviation Safety Group-APAC].
- 17) Urged States which have not yet designated a point of contact to do so by 22 October 2010, to deal with air navigation deficiencies and to provide adequate resources for the timely resolution of deficiencies.
- 18) Established APANPIRG Contributory Bodies Structure Review Task force with members consisting of Sub group Chair persons, Vice Chairpersons and volunteers to be nominated by member States. The Task force will review the ToR and activities of the APANPIRG contributory bodies and propose rationalisation of their structure to APANPIRG/22. Encouraged States to nominate volunteers and contribute.
- 19) Invited ICAO to review the Regional Air Navigation Plan structure, processes and contents and to incorporate them in to e- ANP.

3.2.3 The APANPIRG/21 noted the slow progress in the implementation of the following and urged States to allocate additional resources to expedite their implementation:

- i) PBN and GNSS. Impediments if any on the implementation should be brought to the notice of ICAO Regional Office. Nomination of focal point
- ii) Transition to New flight format by 15 November 2012
- iii) Aerodrome certification and SMS at certified airports
- iv) Resolution of air navigation deficiencies and nomination of contact person

**3.3 DP/3/2 REVIEW OUTCOMES OF APANPIRG/21 ON THE
IMPLEMENTATION OF THE NEW FLIGHT PLAN FORMAT**

3.3.1 This paper was presented by the ICAO Secretariat. The Second Meeting of the Asia/Pacific Flight Plan & ATS Messages Implementation Task Force (FPL&AM/TF/2, November 2009) adopted an Asia/Pacific approach using a phased transition, whereby air navigation service providers (ANSPs) would implement the NEW flight plan format, followed by users. Both the PRESENT and the NEW flight plan formats should be accepted during the Phase 3 from 1 July to 15 November 2012 by ANSPs, and users can file either format. FPL&AM/TF/2 prepared the draft document titled the *Asia/Pacific Guidance Material for the Implementation of Amendment 1 to Procedures for Air Navigation Service – Air Traffic Management, (PANS-ATM, DOC 4444), 15th Edition.*

3.3.2 The paper informs that a State letter Ref.: AN 13/2-2010/31 dated 29 March 2010 was issued by ICAO, requesting States to inform the respective ICAO Regional Office accredited to States, of actions completed toward implementation of the PANS-ATM provisions regarding the NEW flight plan content. This will allow the current status of State implementations to be recorded on the Flight Plan Implementation Tracking System (FITS) at <http://www2.icao.int/en/FITS/Pages/home.aspx>. In view of this, the meeting formulated Conclusion 21/6 – Notification of State Transition Date to the NEW Flight Plan Format.

3.3.3 In addition to the readiness of ANSPs, Hong Kong, China had concerns that airlines would file PRESENT flight plans until the last day of the transition period. The subsequent switching over to the NEW flight plan format on the same day by all airlines with insufficient testing may pose a high risk of serious and widespread coordination problem on that day. Hong Kong, China would have no problem in meeting the target dates of the phased transition plan adopted by FPL&AM/TF with a tentative transition date on 30 June 2012.

3.3.4 This paper stresses that it is important that coordination between States/FIRs should be started as soon as possible to ensure a smooth transition. The meeting adopted Conclusion 21/13 - Coordination for the Transition to the NEW Flight Plan Format among States.

3.3.5 The paper further notes that there continues to be significant variation in the preparation and approach of both States and regions. Variation in any part of the format is likely to create problems for both airlines and ANSPs. AIDC messaging in particular creates a major problem for States reliant on the ability of other States “upstream” to process messaging appropriately.

3.3.6 The APANPIRG/21 meeting agreed that the regional and the global coordination be further enhanced and any global and regional coordination issue should be raised with ICAO headquarters and possibly at the DGCA/47 in October 2010, and adopted Conclusion 21/14 - Enhancement of the Global Coordination for Implementation of the NEW Flight Plan Format.

**3.4 DP/3/10 AN UPDATE ON ADS-B IMPLEMENTATION IN THE SOUTH
CHINA SEA**

3.4.1 CANSO paper provides an update on ADS-B implementation in the South China Sea. The paper highlights the project implementation plan to conduct ADS-B operational trials on airways L642 and M771 in 2011/2012 followed by full ADS-B operations in 2013/2014. The paper reports on discussions at the last ICAO ADS-B Task Force Meeting on possible expansion of ADS-B surveillance to cover other busy airways and a request for the

Philippines and Brunei to consider installing ADS-B stations to cover the trunk routes N884 and M767 routes. CANSO commended the ANSPs in the region collaborating on ADS-B implementation and noted that it was the way forward to achieving a seamless sky in the region.

3.5 DP/3/11 CANSO'S SEAMLESS AIRSPACE GUIDANCE DOCUMENT

3.5.1 CANSO presented a paper on the development of a Seamless Airspace Guidance Document by its Seamless Airspace Workgroup. The paper summarizes the key points in the guidance document, in particular the thinking behind the concept of seamlessness, the minimum functional airspace requirements and the integration process needed to achieve seamlessness. The CANSO document identifies the functional areas of Seamless Airspace - Infrastructure, Procedures, Information Management and Regulation as well as the characteristics of Seamless Airspace and the Minimum Seamless Airspace requirements. It stresses the need to agree on what is meant by seamless airspace and what it entails to avoid confusion. The paper stresses that the issue is not about forcing identical systems on ANSPs because not all will have the same level of traffic volume and complexity but rather about standardization, harmonization and interoperability. This document will be finalized by the CANSO Workgroup and made available in the CANSO website www.canso.org by end of this year. Although this guidance document is still in draft form, CANSO has made its availability known at APANPIRG/21 to facilitate discussions and future work on the subject of seamless sky by the region.

3.6 DP/3/12 PROMOTING ATM INDUSTRY BEST PRACTICES IN THE ASIA PACIFIC REGION

3.6.1 CANSO presented a paper highlighting the importance for ANSPs to share industry best practices and the ATM events that CANSO will be holding in November 2010 in Singapore to promote ATM best practices in safety and operations. The region's vision of a seamless, safe and efficient ATM system can only be achieved if ATM best practices are disseminated, shared and adopted widely by ANSPs across the industry, especially in a fragmented airspace system where international flights cross national and airspace boundaries all the time.

3.6.2 To encourage the promotion and sharing of industry best practices, CANSO will be holding an Asia Pacific ATM Safety Workshop from 7-10 November 2010 and an Asia Pacific ATM Operations Best Practices Seminar from 11-12 November 2010. These events focusing on the ATM industry's best practices in safety and operations will be facilitated by experts drawn from CANSO's Safety and Operations Standing Committees. The November events coincide with CANSO's Global Safety Conference and all Asia Pacific ANSPs are encouraged to make use of this unique opportunity to discuss common issues and challenges with their counterparts from CANSO's global membership.

3.7 DP/3/13 NEW METEOROLOGICAL SERVICES SUPPORTING AIR TRAFFIC MANAGEMENT

3.7.1 Hong Kong, China presented this paper. The Conference was informed of the new Meteorological Services in the Terminal Area (MSTA). The initiative currently being undertaken by the World Meteorological Organization (WMO) in close collaboration with ICAO aims at providing meteorological services for the wider terminal areas, especially for busy airports, to support Air Traffic Management (ATM). The new MSTA is intended to fill the gap of meteorological services currently not covered by the standards stipulated by ICAO and to promote harmonization in support of Collaborative Decision Making (CDM) and a

consistent approach to avoid duplication of efforts and proliferation of similar information and products.

3.7.2 Prototype MSTA products for convection and wind have been developed by an expert team of the WMO which envisages that the MSTA service will be provided in a digital, gridded format, initially being available as a web-based colour graphic with alerting criteria. It will provide common situational awareness for data sharing by different user groups in support of CDM, and could be supplemented by textual descriptions as appropriate and simplified/condensed to facilitate uplinks to aircraft cockpits. Prototype products are available at the MSTA project web site (<http://www.msta.weather.gov.hk/>) hosted by Hong Kong, China for evaluation by aviation users.

3.7.3 The Conference noted the developments in MSTA and the plan to seek endorsement of MSTA proposal and to be reflected in ICAO Annex 3 at the next Conjoint ICAO MET/AIM Divisional Meeting/WMO CAeM Session (currently scheduled for 2014). The Conference encouraged States to request their MET Authorities to contribute actively to the work of MSTA, through the provision of feedback and suggestions to the respective ICAO and WMO teams, and inputs to a questionnaire made available on the MSTA project web site.

3.8 DP/3/14 PBN DEVELOPMENT IN HONG KONG, CHINA

3.8.1 This paper was presented by Hong Kong, China. Recognizing the importance of PBN for improving safety, capacity, and efficiency of air navigation as well as the environmental benefits to operators and service providers, Hong Kong CAD has developed and submitted a PBN Implementation Plan to ICAO Regional Office in 2009 in line with the ICAO target.

3.8.2 To facilitate development of the Hong Kong PBN Implementation Plan (the HK Plan) and to ensure harmonized development and implementation of PBN procedures among various aviation stakeholders, a local PBN Planning and Implementation Team (PIT) comprising various stakeholders including procedure designers, airspace planners, engineers, flight standards and airworthiness personnel, local operators, representatives of IATA and IFALPA, etc. was established in November 2007. The HK Plan was developed and adopted by the PIT in February 2009.

3.8.3 Brief information of the HK Plan: (1) Approach Airspace - 100% implementation of RNP AR approach procedures by 2012; (2) Terminal Airspace - implement RNAV 1 Navigation Specification by 2012; and (3) En-route Airspace - implement RNP 4 procedures by 2014. On 3 June 2010, Hong Kong, China successfully implemented RNP approach procedures to two runway ends. Hong Kong, China is currently developing a number of PBN initiatives to improve ATC and flight operation efficiency, as well as for noise mitigation purpose.

3.8.4 Hong Kong, China endeavours to share the experience of and the challenges encountered during implementation of PBN implementation at PBN TF meetings. To support the establishment of the Asia-Pacific PBN Flight Procedure Programme (APAC FPP) Office to enhance the PBN procedure design capabilities in the APAC region, Hong Kong, China undertakes to participate as an Active Participating Administration and has committed to post two experienced flight procedure designers through secondment to the APAC FPP Office to assist in the training of PBN procedure designers for other States in the Region and to provide procedure design support to the Office.

3.9 DP/3/19 REGIONAL ATM CONTINGENCY PLAN

3.9.1 Singapore presented this paper. The Conference noted that under ICAO Annex 11, there was a need for ATS authorities to develop and promulgate contingency plans for implementation in the event of disruption, or potential disruption, of ATS and related supporting services in the airspace for which they are responsible for the provision of such services, and that such contingency plans shall be developed with the assistance of ICAO as necessary, in close coordination with the ATS authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.

3.9.2 The Conference further agreed that given the global and trans-boundary nature of air traffic flows, there is a need for ATS contingency plans to be developed and implemented on a regional basis (or a set of sub-regional contingency plans), involving the ATS authorities of adjacent flight information regions / ATS airspaces as well as stakeholders. As far as possible, the regional contingency plan should be a pre-planned standing arrangement, so as to minimize reaction time in the event of any disruption of ATS and related supporting services. Furthermore, there is a need for ICAO to play a leading role, as in the case of the Y2K Contingency Plan, in coordinating and working with States to develop a harmonized regional ATS contingency plan.

3.9.3 The Conference noted that the need for a harmonised ATS contingency plan for the Asia-Pacific region had been discussed at previous meetings under the Asia-Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG), with considerable support for a proposed Task Force to develop this contingency plan. Given the current resource constraints of the ICAO Asia Pacific Regional Office, the Conference discussed a way forward to expedite the formation of such a Task Force and its work to develop a harmonised ATS contingency plan (or a set of sub-regional ATS contingency plans) for the Asia-Pacific region.

**3.10 DP/3/21 DEVELOPMENT OF ACTION ITEMS FOR TRANSITION
FROM AIS TO AIM**

3.10.1 This paper was presented by the Republic of Korea. The “ICAO Roadmap for the Transition from AIS to AIM” provides the States with guidance to transform the current product-centric aeronautical information services (AIS) to the data-centric aeronautical information management (AIM) which is one of the key enablers of ATM Operational Concept.

3.10.2 To implement the AIM in the Republic of Korea, in accordance with the ICAO roadmap, a tailor-made and detailed national AIM implementation plan was required. In this light, the “Republic of Korea AIM Implementation Plan (ROKAIM)” was established in December 2009. This roadmap introduces seven (7) action items which are practical methodology that provides guidance on “who does what in which sequence.”

3.10.3 Any State which are looking for the necessary actions to be taken for the implementation of the ICAO Roadmap, are invited to refer the action items listed in 2.2.1 of the Republic of Korea paper that were developed and being taken by the Republic of Korea, until such time that more enhanced templates for action items are developed by ICAO for global use.

**3.11 DP/3/22 PERFORMANCE BASED NAVIGATION (PBN)
IMPLEMENTATION STATUS IN NEPAL**

3.11.1 Nepal presented this paper. Most of the routes and procedures that are implemented in Nepal are based on conventional ground based navigational aids like NDBs and VOR/DMEs. In order to overcome the operational, topographical and technological limitations in terms of installations, coverage and cost associated with the existing conventional navigational aids, and hence to take the benefit of satellite based navigation, GNSS (GPS) based approaches and routes were designed as early as 1999. In 2005 the procedures were reviewed based on PANS/ OPS (Document 8168 Vol II) with the help of Air Services Australia. The Civil Aviation Authority of Nepal (CAAN) has initiated the works for the PBN implementation in Nepal in response to the call of the 36th Session of ICAO Assembly resolution to ensure RNAV and RNP operations according to established timeframes and implementation of Augmented GNSS for approaches with intermediate milestones. In line with this, some ATS routes have been redefined by way-points in place of NDBs to facilitate the aircraft using RNAV - GNSS. The CAAN will implement PBN in Near Term 2010–2012 time frame and has plan of implementing the GNSS/RNAV with LNAV departure and approach as well as RNAV SIDs and STARs at some of the airports. CAAN will pursue its efforts in providing necessary training on procedure designing and validation of procedures, particularly for basic PANS/OPS and PBN Procedure Design Courses.

**3.12 DP/3/24 STATUS OF PBN IMPLEMENTATION IN THE ASIA PACIFIC
REGION**

3.12.1 ICAO presented this paper. ICAO Assembly Resolution A 36-23 on Performance Based Navigation Global Goals urged all States to implement RNAV and RNP air traffic services (ATS) routes and approach procedures in accordance with the ICAO PBN concept laid down in the *Performance Based Navigation Manual (Doc. 9613)*. The Assembly further resolved that States and Planning and implementation regional groups (PIRGs) complete a PBN implementation plan by 2009. The Resolution also established timelines to achieve PBN implementation

3.12.2 APANPIRG/18 meeting (3-7 September 2007) considered that implementation of PBN in the region was very important and would yield efficiency and safety benefits. Noting that the participation of all stakeholders in the development of a PBN implementation plan was essential, the meeting agreed that the establishment of a PBN Task Force would likely be the best vehicle to achieve the objective of an accelerated PBN implementation programme regionally. Asia/Pacific PBN Task Force was established in January 2008 and since then the Task Force met seven times. The PBN/TF/7 meeting was held from 1 – 3 September 2010 just prior to APANPIRG/21 meeting (6-10 September 2010). The PBN/TF was initially established for one year but its life was continually extended by APANPIRG to support implementation of PBN at the regional level.

3.12.3 Asia/ Pacific Regional Performance-Based Navigation Implementation Plan (version 1) was approved by APANPIRG/20 in September 2009. APANPIRG/20 (Conclusion 20/36) urged States that had not developed their State PBN Implementation Plan to complete the development of their national PBN Implementation Plan based on the Asia/Pacific Regional PBN Implementation Plan.

3.12.4 Of the 40 States/Administrations in the APAC region, only 28 States and Administrations had nominated their Focal Points. Moreover, as required by the Assembly Resolution 36-23 and the subsequent APANPIRG Conclusions, not all States in the APAC region have submitted their plan to the ICAO Asia Pacific Office. APANPIRG/21 developed

Conclusion 21/32 and urged States which have not developed their State PBN Implementation Plans so far, to develop the plan in accordance with the Asia/Pacific Regional PBN Implementation Plan at the earliest and advise the Regional Office of the impediments they are facing in the implementation of PBN.

3.12.5 Based on the review of the status of implementation in various States, the PBN TF revised APAC Regional PBN Implementation Plan. The APANPIRG/21 meeting reviewed the revised plan updated by the PBN TF and adopted Conclusion 21/31 that, the revised APAC Regional PBN Implementation Plan Version 2.0 be adopted. The APANPIRG/21 Report is available on the ICAO Asia Pacific website at http://www.bangkok.icao.int/apanpirg_intro.html.

3.12.6 The CNS/MET SG recommended that the continuing contribution of the PBNTF can facilitate the implementation of PBN in the Asia/Pacific Region. It was considered that the existing terms of reference should be reviewed to allow the PBN TF to focus on implementation and to move on from the planning phase to implementation phase of PBN. The APANPIRG/21 noted CNS/MET recommendation that the life of PBNTF should be extended by 3 to 5 years and agreed to the continuation of the Task Force with TOR to be reviewed in the next meeting of PBN TF. The Task Force was also asked to identify the PBN implementation gaps in the States. Accordingly, APANPIRG/21 adopted Decision 21/34 on the PBN Task Force's continuation.

3.12.7 In order to raise the awareness about slow progress of PBN Implementation, the APANPIRG/21 meeting identified the need to bring it to the attention of the next DGCA Conference and adopted Conclusion 21/35 requesting ICAO to highlight the slow progress and impediments in PBN implementation at the upcoming 47th DGCA Conference for its support to expedite implementation.

3.12.8 The paper invites the Conference to encourage States that have not developed their State PBN Implementation Plan to do so at the earliest in accordance with Asia/Pacific Regional Performance Based Navigation Implementation Plan Version 2 and submit it to the ICAO Asia Pacific Office; and meet the timelines for PBN implementation as stipulated in the Asia/Pacific Regional PBN Plan.

3.13 DP/3/25 CIVIL/MILITARY CO-ORDINATION

3.13.1 ICAO presented this paper on Civil Military Coordination. The Global Air Traffic Management Forum on Civil/Military Cooperation was held in Montréal from 19 to 21 October 2009, to foster and promote improved civil/military cooperation and coordination and to optimize use of airspace.

3.13.2 Although the *Convention on International Civil Aviation*, (Doc 7300), applies only to civil aircraft and is not applicable to State aircraft, ICAO can, however, play a pivotal role in improving the level of co-operation and co-ordination between civil and military authorities.

3.13.3 Annex 11, Chapter 2, 2.15 and 2.16 contain provisions for co-ordination between military authorities and air traffic services and co-ordination of activities potentially hazardous to civil aircraft, which include early co-ordination that permits timely promulgation, minimizing the effect on civil air traffic of military operations, and direct communications between military organizations and civil air traffic agencies.

3.13.4 The inclusion of military officials in national and regional airspace or ATM planning meetings is an important step in meeting the Annex provisions, by ensuring a higher

degree of understanding between military and civil agencies of each other's operational requirements. It also serves to highlight the simultaneous responsibility of the military in regard to air safety, efficiency and caring for the environment while discharging their national security responsibilities.

3.14 DP/3/26 DELAY IN GNSS IMPLEMENTATION

3.14.1 DP/3/26 presented by ICAO highlights the issues inhibiting the implementation of global navigation satellite system (GNSS) and provides details of ICAO initiatives taken to overcome these hurdles.

3.14.2 Global Navigation Satellite System (GNSS) is a foundation to achieve improvements to safety, efficiency and regularity for aviation in the future. GNSS-centred performance-based navigation enables a seamless, harmonized and cost-effective navigational service from departure to the final phases of approach and landing that will provide benefits in safety, efficiency and capacity. GNSS is also a navigation function enabling surveillance through Automatic Dependent Surveillance - Broadcast (ADS-B).

3.14.3 Despite the benefits demonstrated to the States which have implemented GNSS, adoption has not been universal. Some States are yet to reference their aeronautical information to the standardized World Geodetic System 1984 or to develop elementary GNSS based flight procedures. In some States, basic regulatory arrangements to support GNSS usage have not even been promulgated.

3.14.4 The global shortage of qualified and experienced instrument flight procedure designers is a limiting factor in the implementation of GNSS procedures. The requirement of RAIM prediction data, one of the responsibilities assigned to the States which have adopted GNSS, is another factor discouraging adoption.

3.14.5 The probability of a constellation failure is remote, given the widespread use of GPS in many applications and the proven reliability of the system. Effective spectrum management and a viable strategy to mitigate the effects of intentional interference can reduce its impact to a very low level. Ionospheric abnormalities can disrupt approach with vertical guidance service based on SBAS in certain areas (mainly equatorial), but generally GPS provides very good availability of en route through non-precision approach guidance even in these areas. Intentional denial of service in an area would be associated with extreme geopolitical situations. It is necessary to anticipate the possibility of GNSS service interruption or degradation during a national emergency situation (Article 89 of the Convention on International Civil Aviation refers), but this is not new with GNSS – it has existed for many years with all navigation aids.

3.14.6 APANPIRG/21 meeting agreed that while much progress had been achieved in the PBN initiative such as use of GNSS in the oceanic phase but it felt more could be achieved in the terminal and approach phases. The meeting suggested a need to raise awareness of the existence of Revision 1 of GNSS Manual (Doc 9849) amongst the aviation community. This document is available on the ICAONET and States can access the document with the provided password. The Manual is a comprehensive reference to assist States in addressing core constellation issues. GNSS Manual was first published in 2005 and is currently being revised and updated. The revised manual will harmonise guidance with more recently developed manuals such as the Performance Based Navigation (PBN) Manual (Doc 9613) etc. The revision will also address implementation issues identified by States. Some additional guidance in the preparation of safety cases, business cases and environmental assessment is expected to be addressed in the revised GNSS Manual.

3.14.7 The paper invites the Directors General to consider bi-lateral and multi-lateral programs to accelerate the adoption of GNSS navigation. Information exchange including examples on safety and business cases and environmental assessments are practical way of promoting adoption of GNSS.

3.15 DISCUSSIONS AND SUMMATION BY THE MODERATOR

The Moderator briefly summarized the key areas of presentations and the discussions under this Agenda Item.

3.15.1 ICAO presented DP/3/1 which covered the activities and outcomes of APANPIRG/21 followed by DP/3/2 on Implementation of the New Flight Plan Format, DP/3/24 on Status of PBN Implementation in the Asia Pacific Region and DP/3/26 on Delay in GNSS Implementation.

3.15.2 ICAO reported to the Conference the decisions of APANPIRG on the Planning and Transition arrangements for the New Flight Plan Format and highlighted the need for interregional co-ordinations. Hong Kong, China also emphasize on the importance for states to provide planning and implementation data to the ICAO FITS website and airline operators to file the New Flight Plan Format during the Phase 3 transition period so as to reveal the co-ordination problems in the region as early as possible.

3.15.3 CANSO presented DP/3/11 and DP/3/12 on their initiatives of producing a Seamless Airspace Guidance Document which could be shared by ANSPs in the region and organizing a Global ATM Safety Conference and Best Practices Seminar in Singapore in November. Hong Kong, China expressed appreciation of the safety initiatives of CANSO and commented that they would actively participate in the ATM conference and the seminar.

3.15.4 Singapore recognized the collective efforts of ICAO, Member States and administrations in the APAC region, international organizations and experts in these fields for their collective efforts and contributions to the work and success of APANPIRG. Singapore also presented DP/3/19 highlighting the need for a regional ATM contingency plan and the need to establish an ICAO TF to take the proposal forward.

3.15.5 Republic of Korea presented DP/3/21 and shared their experiences on Development of Planning and Operational Requirements for Transition from AIS to AIM.

3.15.6 ICAO updated the Conference on the slow progress of PBN and GNSS implementation in the region under DP/3/24 and DP/3/26 respectively. APANPIRG would commence a review on TOR of the PBN TF to make it focus on PBN implementation in the region. Singapore and Hong Kong, China expressed full support to the plan and ICAO highlighted the slow progress of implementation and lack of response from states to submit their PBN implementation plans. It would be crucial for the review team to have the information for regional implementation in a coordinated and harmonized manner. For GNSS implementation, ICAO urged States and Administrations to develop bilateral and multilateral collaborative arrangements for regional GNSS implementation.

3.15.7 Hong Kong, China and Nepal presented DP/3/14 and DP/3/22 respectively and shared their experiences and status of PBN implementation at the Conference. Hong Kong, China also provided a website and a PBN implementation booklet for sharing by delegates at the Conference. Korea commented that the implementation of PBN requires the concerted efforts of all aviation stake holders.

3.15.8 In DP/3/10, CANSO updated the conference on ADS-B implementation on trunk routes in the South China Sea and encouraged States and Administrations to work together and collaborate closely to increase ADS-B coverage in the region.

3.15.9 Hong Kong, China updated the Conference the new initiative of providing new Meteorological Services in the TMA by WMO in DP/3/13. This Met Services in the Terminal Area would provide forecast of weather elements critical to aviation with longer lead time, much finer resolution and digital updates. It would benefit users for flight operations, ATM and airport operations. WMO would require the input and comments from users in order for MSTA to be endorsed in the year 2014.

3.15.10 ICAO also presented DP/3/25 on the need to enhance Civil and Military ATM Co-ordinations. Although the Chicago Convention applies only to civil aircraft, the paper reviewed some provisions in the ICAO documents which could facilitate a safe and efficient ATM coordination between civil and military operations.

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

AGENDA ITEM 4
AVIATION SAFETY

Macao, China : 25 - 29 October 2010

AGENDA ITEM 4: AVIATION SAFETY

**Moderator: Mr. John McCormick
Director of Aviation Safety
Civil Aviation Safety Authority, Australia**

4.1 The Regional Director made a presentation on the Regional State of Safety in the Asia and Pacific regions. In his presentation the Regional Director highlighted the Global Aviation Safety Plan (GASP) Safety Targets, discussed the use of the USOAP Results as Safety Indicators, and suggested Safety Improvement Strategies for the region. The following significant points were highlighted:

- Safety Target 1 stipulates the ‘reducing of the number of fatal accidents and related fatalities worldwide’.
- As against the 26 fatal accidents in 2000 there were 14 fatal accidents in 2009; correspondingly the number of fatalities in the related accidents has also decreased over the years.
- The APAC region accident rate is well below the global average (world average 4.137 and APAC average 2.37).
- The five-year moving average is the best metric as it provides a better view of significant trends vis-à-vis individual data points.
- Starting from 2006 there has been an upward trend in the number of accidents and this has continued till 2009.
- The Conference was requested to take note of this upward trend which needs to be arrested.
- The regional metrics have limited value and therefore additional GASP metrics are needed to support a targeted safety strategy.
- Related safety data can be linked it to multiple safety indicators i.e. traffic density to accidents; accident categories and USOAP results, in particular with States with significant safety concerns (SSC).
- The lack of effective implementation (LEI) of the Critical Elements (CEs) at the regional level indicate that only six States were below 30% LEI, while another six States were between 30% - 50% LEI, and the remaining seven States that had been audited were above 50% LEI (data based on 19 States audited).
- From the analysis of data the possibility of an increase in APAC’s accident rate can be predicted.
- If APAC improves its LEI rate by 10% every year then this would counteract the increasing accident rate trend.
- There is a need to improve all LEI’s irrespective of traffic volumes and develop appropriate solutions with priority given to States with high levels of implementation deficiencies.

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4.2 Eighteen (18) Discussion Papers and eleven (11) Information Papers were received under this Agenda Item. The following eighteen (18) Discussion Papers were presented.

REF.	TITLE	PRESENTED BY
DP/4/3	Establishment of Regional Aviation Safety Group in Asia and Pacific (RASG-APAC)	ICAO
DP/4/4	Training Profiles and Corresponding Required Training to Meet ICAO Safety Oversight Obligations for Qualified Technical Personnel	United States of America
DP/4/5	Airfield Safety in the United States	United States of America
DP/4/6	Development Status of Language Proficiency Requirements and Challenges in Nepal	Nepal
DP/4/7	ANS Safety Management the Experience of Hong Kong, China	Hong Kong, China
DP/4/8	Airport Compatibility and Readiness for B747-8F Operations - the Hong Kong China Experience	Hong Kong, China
DP/4/9	Planning for SEA Search and Recovery Operations - A Small Investigation Agency's Perspective	Singapore
DP/4/11	Training Investigators and Maintaining Their Expertise	China, France and Mongolia
DP/4/16	Promotion of Seamless Sky in the Aviation Safety	Japan
DP/4/17	ICAO Safety Management Activities	ICAO
DP/4/18	Poaching Activities of Highly Trained Technical Personnel (Both Flying and Non-Flying) by Foreign Aviation Entities	Republic of the Philippines
DP/4/19	Implementing the Voluntary Incident Reporting System by the CAA	Macao, China
DP/4/20	Considerations in Transition to the Implementation of State Safety Programme (SSP) Environment	Republic of Korea
DP/4/21	Safety Plan for UAS in the Republic of Korea	Republic of Korea
DP/4/22	Widening the Cooperation in the Region in Sharing of Safety Information Developed by Foreign Operator Inspection	Republic of Korea
DP/4/23	Review of Regulatory Framework for the Use of Portable Electronic Devices (PEDs) on Board in the Aircraft	Republic of Korea
DP/4/25	Aviation Safety Activities in Nepal	Nepal
DP/4/27	Status of Implementation of Enhanced Airfield Markings in Macau International Airport	Macao, China

4.3 DP/4/3 ESTABLISHMENT OF REGIONAL AVIATION SAFETY GROUP IN ASIA AND PACIFIC(RASG-APAC)

4.3.1 This paper presented by the ICAO Secretariat, provides information on the establishment of a Regional Aviation Safety Group - Asia Pacific (RASG-APAC). The paper seeks the views of the Directors General Civil Aviation on how to best establish the RASG in an effective and efficient manner.

4.3.2 On 6 October 2009, the ICAO Air Navigation Commission reviewed a proposal for the establishment of Regional Aviation Safety Groups (RASGs) and decided that the concept of RASGs be transmitted to States and appropriate international organizations for comments before a recommendation was made to the Council. It was highlighted during the discussions that the proposal for RASGs would not fundamentally change the efforts that are presently underway in several ICAO regions.

4.3.3 A State letter dated 16 December 2009 sought comments from States and selected international organizations on the need for uniform establishment of RASGs in all regions, and provided suggested terms of reference and work programme of the RASGs. The comments by States are very supportive of the establishment of RASGs. Comments from States in the Asia Pacific did highlight the work being undertaken by the Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs) and the need to avoid a duplication of effort.

4.3.4 At the 4th Meeting of its 190th Session, held in May 2010, the ICAO Council approved the establishment of RASGs. This decision established the mandate for the ICAO Secretariat to establish RASGs, nurture their development and guide their activities, recognizing that the planning must consider the related resources such as COSCAPs.

4.3.5 The RASG-APAC, similar to Planning and Implementation Regional Groups (PIRGs), would allow the reports of RASGs to be reviewed by the Commission on a regular basis, and by Council as deemed necessary, thus providing interregional harmonization related to flight safety issues and a means to monitor implementation of Global Aviation Safety Plan / Global Aviation Safety Roadmap (GASP/GASR).

4.3.6 The paper briefly discusses the Terms of Reference and membership of the RASG-APAC as well as the resources that would be available to it. Subject to the approval of the various COSCAP Steering Committees, it is envisioned that the COSCAPs would provide support to the safety group.

4.3.7 The paper notes that while the APANPIRG does touch on some safety issues, its mandate is to deal with air navigation plans at a regional and global level with ICAO playing a key leadership role. It is expected that States will provide input on how to determine the safety issues to be covered by the RASG-APAC and those that should remain with the APANPIRG. In addition, the ICAO Secretariat will ensure that the safety issues raised by the APANPIRG and RASG-APAC are fully coordinated.

4.3.8 In order to avoid creating a separate forum for the RASG-APAC, and cut on overall costs and efforts, the paper suggests that the RASG-APAC Meeting (one/two day meeting) be convened concurrent with the Conference of the Directors General of Asia and Pacific Regions.

4.3.9 While it is envisioned that the RASG-APAC would substitute for the combined COSCAP Asia Regional Aviation Safety Team (ARAST) mechanism and encompass the entire Asia and Pacific regions, it is expected that the COSCAP programmes would provide support to the RASG-APAC, in order that all Administrations in the Asia Pacific Region collectively participate in developing safety interventions to reduce safety risk at the regional level.

4.3.10 The paper recognizes that the RASG-APAC meetings will be high-level, attended by the Directors General, as such there will still exist a need to have working level arrangements such as ARAST composed of technical specialist who would review safety issues and develop safety interventions/ enhancements. The implementation of recommendations emanating from the RASG-APAC will be the responsibility of the respective State administration. The RASG-APAC will monitor the level of implementation to ensure that the targets of the GASP / GASR are effectively met.

4.4 DP/4/4 TRAINING PROFILES AND CORRESPONDING REQUIRED TRAINING TO MEET ICAO SAFETY OVERSIGHT OBLIGATIONS FOR QUALIFIED TECHNICAL PERSONNEL

4.4.1 The United States Federal Aviation Administration (FAA) has developed training profiles for its inspectors and other safety personnel as a standardized tool to assess the training needs and required resources to ensure the technical proficiency of those involved in safety oversight and surveillance of aircraft operations, continuing airworthiness and licensing. The FAA has also developed corresponding training courses or identified training providers to deliver the required training. The training profiles and identification of training courses and providers can be utilized by other civil aviation authorities as a tool in support of ICAO Safety Oversight Manual Part A (Doc 9734 AN/959) Section 3.5.2 on Training of Technical Personnel. The development of a set of more generic training profiles and subsequent exchange of information on training opportunities is being developed through the APEC Transportation Working Group, Aviation Safety Experts Sub-Group.

4.5 DP/4/5 AIRFIELD SAFETY IN THE UNITED STATES

4.5.1 The biggest safety challenge to aviation is not in the air but on the ground. The United States Federal Aviation Administration (FAA) places a high priority on improving airfield safety and, in partnership with industry, airport operators, and air traffic controllers, has implemented new technology and procedures to reduce the risk of runway incursions.

4.5.2 Although the number of runway incursions, especially serious incursions, have declined in recent years - in fiscal year 2009 there were 50 percent fewer than the previous fiscal year – there are still many opportunity for improvement of runway safety. The United States is in the process of testing or installing various ground surveillance systems to identify potential conflicts on the runway; some of these systems are targeted for smaller airports. Lighting systems to warn pilots that runways are unsafe to land on, take off from, enter, or cross are also being developed and tested Moving Map displays in the cockpit are being evaluated. Improvements are being made to the airport surface to enhance safety: enhanced taxiway centerline markings advise pilots that they are approaching a runway; improved Runway Safety Areas provides greater survivability if an aircraft leaves the runway; and use of FOD radar systems can prevent aircraft damage and injuries. The United States has also changed some air traffic control procedures for issuing takeoff clearances and taxi instructions. A voluntary reporting system and root cause analysis of some incursions have given the United States additional insight into the causes of runway incursions and other airfield safety issues, allowing us to address them and pre-empt additional incidents.

4.6 DP/4/6 DEVELOPMENT STATUS OF LANGUAGE PROFICIENCY REQUIREMENTS AND CHALLENGES IN NEPAL

4.6.1 Nepal is poised to meet Language Proficiency Requirement (LPR) by the new timeline of March 2011. As per the call of the State letter of ICAO, CAAN posted its implementation plan in early 2008, with compliance target of 2009. Two major challenges faced by CAAN were accentuated by lack of supportive documents at national level and shortage of manpower. However, considering the challenge of system establishment with regard to language requirements implementation, an amended plan was posted with ICAO LPR website with compliance target of March 2011. Process is underway, with training and testing to be executed by its own limited trainers and testers. Taking into account the need of reactive and pro-active implementation of LPR, full and complete LPR System establishment in a State is challenging. Workable pool of trainers and category and areas of training are not sufficient. As regards exploration of possibilities in terms of training and expertise, Nepal urges the concerned training organizations and States to continue with their fellowship programmes for developing countries like Nepal, to allow more participation in training and workshops particularly in train-the tester programme and Aviation English Language Proficiency Interviewer/ Rater course STP No. 291/154/LAANENG, rater's recurrent training, curriculum development courses, etc, taking into account the nature of continuity of LPR implementation process in respect of new entrants even beyond 2011. CAAN strongly seeks COSCAP's assistance and cooperation of States and Organizations in CAAN's effort to have smooth and expeditious compliance by the stipulated timeline.

4.7 DP/4/7 ANS SAFETY MANAGEMENT THE EXPERIENCE OF HONG KONG, CHINA

4.7.1 In compliance with ICAO SARPs in Amendment 47B to Annex 11 - Air Traffic Services, the Civil Aviation Department (CAD) of Hong Kong, China applies the concept of Safety Management System (SMS) safety oversight to regulate the provision of air navigation services (ANS). The ANS safety oversight encompasses both the operational and technical aspects of the ANS provision, covering the services of Air Traffic Management (ATM), Aeronautical Information Services (AIS) as well as Communications, Navigation and Surveillance (CNS) within the Hong Kong Flight Information Region. This systems approach has instituted a paradigm shift in safety oversight and management of ANS from a reactive to a more proactive mode.

4.7.2 The new safety paradigm requires the development of Safety Performance Indicators and Safety Performance Targets (SPI/SPT) for ANS operations as well as the corresponding SPI/SPT values which reflect the safety implication of CNS services to ANS operations. Moreover, ANS Safety Requirements together with regulatory working tools are developed under a check-and-balance mechanism so as to ensure local safety regulation requirements and the service provider's safety management capabilities are synchronized. To achieve this goal, there are hurdles with both the regulator and service provider.

4.7.3 To overcome the difficulties, CAD employs the ICAO Doc 9859 - Safety Management Manual as a working foundation. Wherever the ICAO provisions are not available, references are made to research results and best practices published by other regulatory authorities and ANS providers. Balancing the hurdles of change management for quantum leap and the practicality for progressive implementation of an effective SMS for ANS, CAD also adopts the quality management system (QMS) approach to the AIS and CNS domains. The gaps from quality to safety management will be filled by special SMS tools based on a study of mapping between QMS and SMS.

4.7.4 Concurrent with success in SMS implementation for ANS operations, CAD is facing tremendous challenges in various ongoing development activities including completing the CNS safety provision under the SMS framework within a 12-month window and safety assessments of ATM automation under the project for building a new air traffic control center. Major constraints include the absence of prescriptive safety requirements in Annex 10 for compiling procurement specifications and insufficient expertise and resources in applying Human Factors Engineering (HFE) to assess the impact of increasing automation in ATM on air traffic controllers. Such difficulties would have been minimized with the availability of comprehensive guidance on a uniform safety assessment mechanism for the aviation industry. The Hong Kong experience is not unique but may be representative of the situation with other ANS regulators and providers.

4.7.5 The paper invites the Conference to note the benefits of global standards and guidance materials for the uniform safety assessment of ATM automation and CNS/ATM software, and review the training needs on software safety assessment and regulatory safety oversight on the use of software in ATM to ensure safe interoperability of CNS/ATM systems worldwide.

4.8 DP/4/8 AIRPORT COMPATIBILITY AND READINESS FOR B747-8F OPERATIONS - THE HONG KONG CHINA EXPERIENCE

4.8.1 As more and more airlines are planning to operate “New Larger Aircraft” (NLA) like the B747-8F to provide the extra capacity needed to meet the demand, many airports that were built to ICAO Code E requirements have to face the challenge in accommodating these NLA with existing airfield facilities.

4.8.2 In anticipation of the arrival of the first Code F freighter, B747-8F, at the Hong Kong International Airport (HKIA) in early 2011, the Airport Authority Hong Kong (AAHK) conducted a comprehensive airport compatibility study in early 2010 to assess the readiness of the HKIA in accommodating this new aircraft type, in terms of both the physical characteristics of the airfield and the supporting services/equipment required. The Hong Kong Civil Aviation Department (CAD), as the aerodrome licensing authority, provided guidance and advice to the AAHK and oversaw the conduct of the study to ensure the safe and efficient operations of this new aircraft type at the HKIA.

4.8.3 The study was completed in April 2010 and concluded that the HKIA was ready for Code F aircraft operations except that the shoulder width of certain taxiways leading to the cargo apron did not conform to some ICAO Code F recommendations. After giving due consideration to the functions of taxiway shoulders, the operating characteristics and performance of the B747-8F aircraft and similar studies carried out by other aeronautical authorities, the CAD was satisfied that the existing taxiways are adequate for B747-8F operations and endorsed the recommendations in the study in July 2010. The HKIA is now licensed for B747-8F operations and the AAHK is required to conduct a safety review within one year after the commencement of B747-8F operations at the HKIA to assess if further enhancements to the procedures and/or airfield infrastructure are required.

4.8.4 The Hong Kong, China’s experience in this aspect highlights the importance of good planning and the need for the aerodrome licensing authorities to work hand in hand with the aerodrome operators in conducting appropriate compatibility studies to proactively evaluate the suitability of existing infrastructure and facilities for the new operational requirements. Should it found to be impracticable to fully comply with the ICAO SARPs in the specific aerodrome environment, alternative measures, operational procedures and/or operating restrictions should be identified so as to provide an equivalent level of safety. Furthermore, a safety review should be conducted subsequently in the light of actual operational experience.

4.9 DP/4/9 PLANNING FOR SEA SEARCH AND RECOVERY OPERATIONS - A SMALL INVESTIGATION AGENCY'S PERSPECTIVE

4.9.1 This paper shares information on the activities that the Air Accident Investigation Bureau of Singapore (AAIB) had undertaken to plan for a flight recorder sea search and recovery operations. In order to be able to carry out effectively the daunting task of searching for and recovering the flight recorders and wreckage in international waters, the AAIB set up a task force in mid-2009 to develop the necessary plans and enhance the AAIB's sea search operational capabilities. The task force had identified the approaches for the AAIB to fulfill.

4.9.2 At this stage, the AAIB envisages the dispatching and deployment of two teams to respond to a sea search situation: a Search and Recovery Team (SRT) and an Investigation Support Team (IST). The task force had also identified the relevant domestic agencies and organizations, the types of resource needed for sea search and recovery, as well as the training needs of investigators and availability of training opportunities. The AAIB is developing a database that aims to consolidate all the contacts information in respect of SAR authorities, investigation agencies, Singapore's foreign missions, as well as the salvage companies (including information on their operational bases, capabilities and assets, and the location of the assets). Knowing the importance of gaining practical experience in the mobilization and organization of a sea search and in the use of search and recovery equipment, the AAIB also sent its investigators to attend workshops and exercises on underwater search of recorders conducted by other investigation agencies.

4.9.3 The paper invites the Conference to note the desirability for a State to have a flight recorder sea search and recovery plan in the event of a sea crash of its aircraft; and endorse regional cooperation in flight recorder sea search planning and operations and joint exercises.

4.10 DP/4/11 TRAINING INVESTIGATORS AND MAINTAINING THEIR EXPERTISE

4.10.1 This paper was jointly presented by China, France and Mongolia. Air travel remains the safest means of transportation but despite the efforts made to improve safety by all the participants in safety culture, accidents still occur.

4.10.2 Whatever their size and geographical location, whether they have highly developed aviation activity or not, whether they have an independent investigation body or appoint a dedicated commission, States must have trained investigators to establish the causes of an accident and to propose the safety recommendations that can help to avoid another disaster.

4.10.3 The Discussion Paper reminds the Conference of the aftermaths of an air disaster and the crisis it leads to in many circles, and it recalls the aim of a safety investigation. It gives examples of the personal attributes and technical skills an investigator must have to fulfill his task, then it emphasizes on how to train investigators and how to maintain and develop their expertise.

4.10.4 To set examples, China, France and Mongolia present their respective policies related to the initial and recurrent training of their investigators and they invite the States that attend the Conference to check if the training of their investigators is fully adapted to a major investigation.

4.10.5 Further, China, France and Mongolia also invite the Conference to endorse the organization of a regional working group to define what would be the best way to maintain investigator's expertise.

4.11 DP/4/16 PROMOTION OF SEAMLESS SKY IN THE AVIATION SAFETY

4.11.1 As air traffic is expected to increase steadily in the Asia and Pacific Regions, it is needless to mention that further improvement of aviation safety is required. In this regard, Japan proposes the Member States, based on the Kansai Statement, to promote the recognition of the importance of each State's role in ensuring that its air operators establish and maintain the highest standards in safety through the proper implementation of SMS as well as the importance of the safety monitoring activities for the foreign aircraft by the States in the Regions.

4.12 DP/4/17 ICAO SAFETY MANAGEMENT ACTIVITIES

4.12.1 This paper is presented by the ICAO Secretariat. In order to provide the necessary foundation to the new approach to the management of safety, ICAO has developed safety management Standards and Recommended Practices (SARPs). SSP and SMS provisions are however spread over seven of the eighteen Annexes, which makes it difficult to cross refer the provisions.

4.12.2 To further assist States and their service providers with the implementation of SMS, ICAO has delivered SSP and SMS training courses since 2006

4.12.3 As a result of the High-level Safety Conference held in ICAO Headquarters, Montréal in 2010, a series of conclusions and recommendations in support of the ICAO safety initiatives provide a guideline to the future work of the organization in supporting the different aspects of the implementation on safety management in its member States.

4.12.4 The HLSC 2010 endorsed the ICAO safety framework, an internal safety decision-making process, based on a systems perspective, sustained by analysis and monitoring of safety performance metrics. Both SSP and SMS require a steady inflow of safety data beyond those related to accidents or serious incidents to function effectively. Effective interaction between States and industry, is essential to create the necessary flow of information required in order to achieve successful SSP implementation. Also, the ICAO safety framework establish roles and inter-relationships for ongoing initiatives such as the Global Aviation Safety Plan, the Global Aviation Safety Roadmap and the Regional Aviation Safety Groups

4.12.5 The training courses /workshops revealed that implementation of some elements contained within the SMS/SSP frameworks may be challenging and will require development of State capabilities to collect and analyze safety-related information from operational activities conducted by service providers under their oversight. In addition, the States' safety analysis capabilities may be inadequate or incomplete unless a strong legislative framework is in place.. ISM is also developing enhanced safety analysis capabilities to support ICAO's internal safety programmes and to facilitate safety information sharing in the future.

4.12.6 One of the most significant challenges faced by States is to develop performance-based regulations as safety risk controls. This new approach requires a rule-making process to be carried out utilizing risk management principles. The new Annex will consolidate safety management responsibilities and processes currently contained in multiple Annexes.

4.12.7 The Integrated Safety Management (ISM) Section continues to support ICAO's strategic approach to safety management through development and implementation of safety management principles, policies and related activities.

4.12.8 A key activity being conducted by ISM is the consolidation of ICAO internal data sources and the analysis of aggregate safety data, as well as the exchange of safety information among Member States. For this reason, ICAO created an Integrated Safety Trend Analysis and Reporting System (iSTARS), which is currently under development. An iSTARS prototype has been implemented by the ICAO Information and Communication Technology Section in accordance with the concept of operations, system requirements, and architecture established by the ISM Section. One of the main benefits of iSTARS will be the capacity to exchange aggregate safety data analysis that supports identification of safety concerns and prioritization of related action plans that are an essential components of the State Safety Programme.

4.12.9 ICAO will continue its efforts to ensure the effective sharing of safety information, which is essential to the furtherance of aviation safety based on the development and use of consistent safety indicators.

4.13 DP/4/18 POACHING ACTIVITIES OF HIGHLY TRAINED TECHNICAL PERSONNEL (BOTH FLYING AND NON-FLYING) BY FOREIGN AVIATION ENTITIES

4.13.1 In its paper Republic of the Philippines, through the Civil Aviation Authority of the Philippines (CAAP), requests the 47th DGCA Conference in Macao SAR to draft and adopt a resolution to mitigate sudden departures from airlines and aviation enterprises of highly trained, qualified and licensed personnel from 3rd world developing countries to fast developing aviation markets.

4.13.2 The paper outlines the problems the Philippines and other developing economies are facing due to an uncontrolled and sudden departure of these personnel.

4.13.3 Specifically, CAAP is asking the *Asia* and Pacific regional members to adopt a resolution laying down measures to prevent *the unbridled* migration of aviation experts to achieve the necessary balance in the availability of skilled professionals and ensure long term aviation safety and sustained air transport growth.

4.13.4 This may include requiring the pilots and other highly trained, qualified and licensed personnel transferring to other international entities/carriers to give sufficient notice to allow their employers time to recruit replacements.

4.13.5 This resolution is needed in anticipation of the projected industry requirement of more than a million highly trained and skilled licensed aviation experts which may lead to mass exodus from airlines and aviation companies from developing economies.

4.14 DP/4/19 IMPLEMENTING THE VOLUNTARY INCIDENT REPORTING SYSTEM BY THE CAA

4.14.1 Macao SAR presented this paper. ICAO Annex 13 Paragraph 8.2, becoming a standard since Amendment No. 12B, requires States to establish a voluntary incident reporting system (VIRS) to facilitate collection of information on actual or potential safety deficiencies that may not be captured by the mandatory incident reporting system. According to the results of ICAO USOAP audits, a large number of audited States failed to meet this ICAO provision. As is a common phenomenon in many of these States, there may not be an independent entity

suitable for the administration of the system. It therefore becomes a challenge to the Civil Aviation Authority (CAA), when simultaneously carrying out the role of the regulator, to implement the VIRS without jeopardizing the non-punitive and confidential principle of the system.

4.14.2 For successful implementation of the system by CAA, first of all, States should ensure there is in place a proper legislation for protection of safety data. ICAO Annex 13 Attachment E contains useful reference material for development of such legislation. Secondly, States can consider having an appropriate immunity policy which will give more incentive to aviation participants to make a report. Besides, the CAA must have proper internal structure for ensuring that the VIRS function is fully independent from other operational departments. In addition, the CAA must also develop proper internal procedures aiming to ensure independence, confidentiality and proper use of safety data. Last but not the least, continuous education and promulgation to the industry should be performed.

4.14.3 The paper invites the Conference to encourage States not having an independent entity for VIRS implementation to consider using the CAA as the execution organization taking into account the key factors as discussed in this paper.

4.15 DP/4/20 CONSIDERATIONS IN TRANSITION TO THE IMPLEMENTATION OF STATE SAFETY PROGRAMME (SSP) ENVIRONMENT

4.15.1 This paper was presented by the Republic of Korea. At the High-Level Safety Conference (HLSC) 2010, many States outlined their concerns related to difficulties and impediment in the transition to the State Safety Programme (SSP) environment which relies upon risk-based and data-driven safety management. As a result of HLSC 2010, ICAO will take follow-up action to resolve the concerns raised by States and other stakeholders. On the other hand, ICAO's proactive safety management approach will be relying upon the implementation of State's SSP/SMS for a significant increase in the amount of information available to support proactive safety analyses, which will be an inevitable consequence.

4.15.2 This paper describes what needs to be considered in the transition to the implementation of SSP. It also suggests considering any possible area of mutual cooperation in the Asia-Pacific region with a view to successfully implement SSP.

4.16 DP/4/21 SAFETY PLAN FOR UAS IN THE REPUBLIC OF KOREA

4.16.1 As highly advanced and different types of Unmanned Aircraft System (UAS) for both civil and military purpose are in use in the Republic of Korea (ROK), the ROK is developing basic regulatory framework for UAS in order to assure the safety of UAS operations.

4.16.2 Since there are no international standards and agreed practices for UAS flight operations, the regulatory framework for safe operations is being developed by individual States at its discretion. Further, there are emerging issues to be addressed regarding reliability of vehicle, ATM integration, frequency utilization, increasing flight safety within the airspace, application coverage of regulatory measures that have been implemented for manned aircraft, etc. for securing the safety of UAS operations.

4.16.3 The paper highlights that the increased number of UAS flights could lead to significant impact on the safety of manned civil aviation operations within the existing airspace. It concludes that safety standards and regulations on UAS flights will be necessary for harmonized and safe operations of UAS.

4.16.4 Also, given that the technology of UAS is developing very fast with great demands from the industry, global discussions on the UAS safety issues would be necessary in the near future. In this regard, mutual efforts and close cooperation for safety research and information sharing among ICAO, member States, international and regional bodies concerned will be indispensable for facilitating safe operation of UAS on a national, regional and global basis.

4.17 DP/4/22 WIDENING THE COOPERATION IN THE REGION IN SHARING OF SAFETY INFORMATION DEVELOPED BY FOREIGN OPERATOR INSPECTION

4.17.1 The Republic of Korea adopted *the fifth edition of ICAO Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc. 8335)* for continued safety surveillance programme and ramp inspection on national and foreign operators.

4.17.2 Continued safety surveillance on foreign operators is performed through repeated ramp inspections. The frequency of ramp inspection on each operator varies with the criteria based on its the dispatch reliability and fatal accident rate, international safety indicators mentioned above, which includes Significant Safety Concerns of ICAO USOAP, FAA IASA Category for the State of the Operator and EU blacklist.

4.17.3 Recovering from the global economic crisis, the frequency of operation by foreign operators has been on the rise resulting in increased safety surveillance and ramp inspection.

4.17.4 For the purpose of enhancing civil aviation safety in the region, the ROK suggests to widen the cooperation framework among States in the region by sharing safety information which has been developed from the number of ramp inspections on foreign operators.

4.18 DP/4/23 REVIEW OF REGULATORY FRAMEWORK FOR THE USE OF PORTABLE ELECTRONIC DEVICES (PEDS) ON BOARD IN THE AIRCRAFT

4.18.1 The Republic of Korea presented this paper. Although the increasing use of the PEDs in aircraft can create a new threat to aviation safety, ICAO has no detailed guidance relating to the use of the PEDs. Without ICAO Standards or guidance, regulations on the use of the PED on board the aircraft will not be harmonized amongst States. Although there is no observable anomaly in the PED EMI tests on the ground, it is necessary to harmonize the regulations on the use of the PEDs to minimize the confusion amongst passengers.

4.18.2 The Republic of Korea suggests strengthening cooperation in the region through sharing of information and experiences on the electromagnetic interference arising from the use of the PEDs, aiming at enhancing both aviation safety and passenger convenience for the use of the PEDs on board in the aircraft.

4.19 DP/4/25 AVIATION SAFETY ACTIVITIES IN NEPAL

4.19.1 Nepal has undertaken some important initiatives for the enhancement of aviation safety despite several constraints. The ideas shared by the neighboring States in the region have proved very helpful in the implementation of the proactive measures as the nature of operation is more or less similar in the region. The active participation in regional forums like COSCAP-SA, SARAST and ARAST are some examples. While complying with the Standards and Recommended Practices, CAA Nepal, in the interest of flight safety, has taken some significant measures. The USOAP in May 2009 has identified various findings which need to be addressed with due attention. Corrective Action Plan (CAP) submitted by CAA Nepal has been periodically updated so that the plans are translated into actions within the stipulated timeframe. CAA Nepal looks forward to the strengthening of its safety oversight capabilities with the cooperation of COSCAP-South Asia and other international agencies as deemed necessary.

4.20 DP/4/27 STATUS OF IMPLEMENTATION OF ENHANCED AIRFIELD MARKINGS IN MACAU INTERNATIONAL AIRPORT

4.20.1 This paper was presented by Macao SAR. Information is referred to Amendment number 10 *Annex 14, Volume I to the Convention on International Civil Aviation*. This relates to the SARP's on Enhanced Taxiway Centerline Marking and Mandatory Instruction Marking, which became effective on 19 November 2009.

4.20.2 Although the Taxiway Centerline/Edge Line Lights, Runway Guard Lights, Stop Bar, Taxiway Centerline/Edge Line marking, Runway-Holding Position marking and Mandatory Instruction Sign are provided at the Macau International Airport, CAA Macao still works in close corporation with the airport operator to follow *ICAO's Recommendations 5.2.8.4 and 5.2.16.2* to provide the Enhanced Taxiway Centerline Marking and Mandatory Instruction Marking respectively as an enhanced measure to avoid runway incursion.

4.20.3 The painting work of the Enhanced Taxiway Centerline Marking in Macao International Airport was completed in June 2010 and the Mandatory Instruction Marking is in progress and expected to be completed in November 2010.

4.20.4 The provision of the mentioned markings will provide the pilots with additional warning signs before entering the runway, which will help to prevent the aircraft from entering an active runway and also a wrong runway.

4.20.5 CAA Macao suggests the *Recommendations 5.2.8.4 and 5.2.16.2* to become Standards in Annex 14 in future so that all airports will have the same combination of markings in Runway-Holding Position as a typical measure to avoid runway incursion.

4.21 DISCUSSIONS ON THE PAPERS PRESENTED AND SUMMATION BY THE MODERATORS

DISCUSSION - SAFETY

4.21.1 DP/4/3- Establishment of Regional Aviation Safety Group (RASG-APAC) in Asia and Pacific

4.21.1.1 ICAO reinforced the importance of civil aviation to transport in the world and reiterated that GASP was developed with the close cooperation of industry to deliver coordinated outcomes and includes 3 safety targets by 2011. These include: reduction in the number of fatal accidents; reduction in the global rate of accidents; and ensuring that no APAC

region has a rate 2x higher than the global average. The Secretariat also presented the APAC States' USOAP results.

4.21.1.2 The ensuing discussion focussed around the following safety related areas: Safety Briefing; Safety in General; Training; Reporting and Safety Information; Language Proficiency Requirement; Airfield Operations; UAVs; and Electronic Devices.

4.21.1.3 Sri Lanka stated that as the current Chair of COSCAP- South Asia it would consider it appropriate to take up the matter of RASG for discussion at its Steering Committee Meeting scheduled towards the end of the year.

4.21.1.4 Republic of Korea while strongly supporting the RASG mechanism suggested using the COSCAP resources. There is a need to build a systematic and pragmatic approach. With a growing aviation industry appropriate safety measures will have to be instituted.

4.21.1.5 Canada stated that RASG is a positive step forward. We can learn from the other RASTs already in existence. Incorporate the COSCAPs into the RASG and ensure a clear delineation between the groups to avoid duplication and this is a way forward.

4.21.1.6 India sees this as a positive step. Feels that the issue needs to be discussed further to avoid two parallel systems with the same objectives. Staffing issues need to be worked out including all details.

4.21.1.7 Malaysia supports the initiative; however, Annex 13 must be considered. Some of these issues are State issues and must be included in future studies. Support for the position of India, Canada and Korea. Another forum needed.

4.21.1.8 Hong Kong SAR supports the establishment of the RASG-APAC to address the safety issues of the APAC region.

4.21.1.9 IBAC supports the concept of RASG programme. IBAC stated that the data presented covers the air transport sector and that data is available from other sources of data as well.

4.21.1.10 Japan supports the proposal but sought clarification on the COSCAP versus RASG.

4.21.1.11 Nepal supports the proposal and informs that it is already participating in COSCAP.

4.21.1.12 Philippines support the proposal and feels that to be effective the RASG may need extra staffing.

4.21.1.13 Singapore supports the proposal and stresses that it is necessary to avoid overlap and sought clarification on the implementation process.

4.21.1.14 Fiji supports the RASG concepts and cautions against overlap with the COSCAPs.

4.21.1.15 Indonesia supports but feels there will be a need for better coordination and a clearer definition of the programme

4.21.1.16 Macao SAR supports as it should streamline the process of decision making. The need for further coordination with COSCAPs.

4.21.1.17 ICAO feels that there is no duplication of effort. RASG is focused intervention. COSCAPS taking outputs from the RAST.

4.21.1.18 ICAO: APANPIRG does not address flight safety issues. The intention is to expand the safety net to capture those states which are outside the protocols at the moment. The programme should encompass the entire APAC region. There is a need to coordinate efforts and assist each other.

4.21.1.19 Drawing the attention of the Conference to the Safety Briefing provided earlier by him, the Regional Director inferred that increase focus on safety oversight is most effective when LEIs are high and that reducing high LEIs is a necessary prerequisite to build a solid foundation for SSP implementation. He suggested that States should focus their safety efforts differently according to their LEI's with the intent to transition to a safety management approach once LEIs are reduced to an appropriate level.

SUMMATION BY THE MODERATOR - SAFETY

4.21.2 In his summation the Moderator stated that States generally support the initiative of DP 4/3. There must however be reconciliation of the TORs of the COSCAPS and the RASG to avoid duplication. The ICAO APAC Office is requested to forward the DP 4 / 3 to the 3 COSCAP Steering Committees for review and further requests the Regional Director or the Secretariat to present this paper to the respective Steering Committee meetings.

DISCUSSION - SAFETY IN GENERAL

4.21.3 DP/4/17 – ICAO Safety Management Activities

4.21.3.1 ICAO highlighted the importance of safety data and the management of safety data to the introduction of SMS. The HLSC provides guidance to States on the introduction of SMS.

4.21.3.2 India notes the developments in SSP and SMS. It supports the decisions taken at the HLSC. It is at an advance stage of issuing the SSP regulations. India however feels that more guidance is required on ALoS. How do we give guidance? Request any state experiences?

4.21.3.3 Thailand informed that it is conducting SMS trial in December.

4.21.3.4 ICAO Secretariat clarified that as per the ICAO Annex States shall establish a State safety programme in order to achieve an acceptable level of safety in civil aviation. The acceptable level of safety to be achieved shall be established by the States. Some guidance on ALoS is in the Safety Management Manual but it may not elaborate enough.

4.21.4 DP/4/20 – Considerations in Transition to the Implementation of State Safety Programme (SSP) Environment

4.21.4.1 Republic of Korea feels that ICAO must monitor implementation of SSP and evaluate the work of each State. We require the free flow of information. An International Forum is planned in Korea for next year and it should consider SSP in detail.

4.21.5 DP/4/16 – Promotion of Seamless Sky in the Aviation Safety

4.21.5.1 Japan states that the Kansai Statement and the introduction of SSP and SMS in Japan has been a major step forward. Japan proposed that ICAO should produce information for States to produce Safety Performance Indicators. The conduct of Ramp inspections in Japan have increased since 1999. Air traffic will increase so SMS for foreign carriers is important with respect to the Kansai Statement.

4.21.6 DP/4/7– ANS Safety Management the Experience of Hong Kong SAR China

4.21.6.1 CANSO commended Hong Kong SAR for the excellent paper. CANSO informed the Conference that it had developed guidance material which is available to the delegates.

4.21.7 DP/4/25 – Aviation Safety Activities in Nepal

4.21.7.1 There was no discussion on the paper presented by Nepal.

DISCUSSION - TRAINING

4.21.8 DP/4/4 – Training Profiles and Corresponding Required Training to Meet ICAO Safety Oversight Obligations for Qualified Technical Personnel

4.21.8.1 The United States offered assistance to other States and informed that Courses were available (possibly) in 2011. Generic training profiles may be available to address CE 4 in USOAP via the web (blackboard).

4.21.8.2 Hong Kong SAR stated that States may have unique requirements and inquired if the software can be made available.

4.21.8.3 The United States informed that the software is open and may be discussed with other States.

4.21.8.4 Republic of Korea made an inquiry on how to incorporate Blackboard information.

4.21.8.5 Singapore stated that technical expertise is essential. Training is available in Singapore and it appreciates the sharing of USA's data.

4.21.8.6 Malaysia welcomes this approach and offer from the USA.

4.21.9 DP/4/11 China, France, Mongolia – Training Investigators and Maintaining their Expertise

4.21.9.1 The Conference endorsed the proposal that following the Regional Director's upcoming meetings with the three COSCAP Steering Committees, Item 4.3 as stipulated in the paper on maintaining and developing the expertise of an accident investigator, the need for a working group could be decided at a later date.

4.21.10 DP/4/18 – Poaching Activities of Highly Trained Technical Personnel (Both Flying and Non-Flying) by Foreign Aviation Entities

4.21.10.1 Sri Lanka acknowledged the problems face by the Philippines.

DISCUSSION - REPORTING AND SAFETY INFORMATION

4.21.11 DP/4/19 – Implementing the Voluntary Incident Reporting System by the CAA

4.21.11.1 There was no discussion on the paper presented by Macao SAR.

4.21.12 DP/4/9– Planning for Sea Search and Recovery Operations; A Small Investigation Agency’s Perspective

4.21.12.1 The Conference endorsed the need for regional cooperation in flight recorder sea search planning and operations; and joint exercises.

4.21.12.2 Malaysia informed the Meeting that it is also conducting exercises with Indonesia and Singapore.

4.21.13 DP/4/22 – Widening the Cooperation in the Region in Sharing of Safety Information Developed by Foreign Operator Inspection

4.21.13.1 The Conference agreed with the Republic of Korea recommendation to strengthen regional collaboration and promote sharing of information on the results of foreign operator inspections.

DISCUSSION - LANGUAGE

4.21.14 DP/4/6 – Development Status of Language Proficiency Requirement and Challenges in Nepal

4.21.14.1 There was no discussion on the paper presented by Nepal.

DISCUSSION - AIRFIELD OPERATIONS

4.21.15 DP/4/5 - Airfield Safety in the USA

4.21.15.1 Canada supports the United States position.

4.21.15.2 Philippines supports the United States position.

4.21.16 DP 4 / 27 Macao China – Status of Implementation of Enhanced Airfield Markings in Macau International Airport

4.21.16.1 Hong Kong SAR supported the paper presented by Macao SAR.

4.21.16.2 Malaysia supports this paper as delivered and suggested that the disposal of the recommendation be as stated above.

4.21.16.3 The Conference recommends that if any individual State wants to suggest ICAO to adopt the Recommendation as a Standard they should forward their comments accordingly to ICAO as technology may improve even further before Annex 14 is revised.

4.21.17 DP/4/8 – Airport Compatibility and Readiness for B747-8F Operations – The Hong Kong China Experience

4.21.17.1 There was no discussion on the paper presented by Hong Kong SAR.

DISCUSSION - UAVs

4.21.18 DP/4/21 - Safety Plan for UAS in the Republic of Korea

4.21.18.1 Hong Kong SAR commented that there is no UAVs standard.

4.21.18.2 There is an ICAO committee and the integration of UAVs into civilian airspace and airworthiness standards are issues. Some states are further advanced than others and further work may be considered by future DGCA conferences.

DISCUSSION - ELECTRONIC DEVICES

4.21.19 DP/4/23 – Review of Regulatory Framework for the Use of Portable Electronic Devices (PEDS) On Board In The Aircraft

4.21.19.1 There was no comment on the paper presented by the Republic of Korea.

SUMMATION BY THE MODERATOR

4.21.20 The Moderator summarized the discussion on all the Safety Papers that were presented. He drew the attention of the Conference to the Action Items that were developed under DP/4/3; DP/4/11; and DP/4/27.

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

AGENDA ITEM 5

AVIATION SECURITY

Macao, China : 25 - 29 October 2010

AGENDA ITEM 5: AVIATION SECURITY

**Moderator: Mr. Steve Douglas
Director of Civil Aviation
Civil Aviation Authority of New Zealand**

5.1 The ICAO Secretariat gave a security brief on the results of the first cycle of the ICAO Universal Security Audit Programme (USAP) and progress in relation to the second cycle of USAP with emphasis on the implementation of the 8 critical elements of a security oversight system. Comparisons were given between the global and regional implementation of these critical elements. Further the brief detailed the activities undertaken by the Regional Office and the Cooperative Aviation Security Programme – Asia Pacific (CASP-AP) to assist States to implement the critical elements of a security oversight system. These included:

- Since 2005, 22 States assisted and 9 States are currently receiving legal assistance through CASP-AP;
- CASP AP plans to run a Legal Seminar;
- 55 Programs (NCASP, ASP, NCASQCP, NCASTP) in 24 States evaluated;
- Draft model regulations based on all current conventions & protocol developed by CASP-AP- available in one month;
- Advice given to States as requested;
- In 2010 over 300 AVSEC personnel trained at the APAC ASTCs and specific training provided to over 60 AVSEC personnel in-country;
- As requested procedures, policy and practices developed on a needs basis;
- Screener Certification Program Workshop available at ASTC;
- ICAO Module Screener Certification developed in the region by CASP-AP and available in approx two months;
- Inspector training and Quality Control Workshop available at all ASTCs. Specific in-country training provided in 4 States; and
- Recently updated Crisis Management Course available at ASTCs and tentative plans for an exercise in the region in 2011.

5.2 Nine (9) Discussion Papers and six (6) Information Papers were received under this Agenda Item. The following nine (9) Discussion Papers were presented:

REF.	TITLE	PRESENTED BY
DP/5/1	Macao China's Experience of Participating in the ICAO Universal Security Audit Programme (USAP)	Macao, China
DP/5/3	The Supply Chain Approach to Air Cargo Security	United States of America
DP/5/4	Aviation Security As an Integral Part of the DGCA Agenda	United States of America
DP/5/5	Developments in Aviation Security Technology	United States of America
DP/5/6	Aviation Security Capacity Development Activities	United States of America

DP/5/7	Aviation Security Activities in Nepal	Nepal
DP/5/8	Asia-Pacific Aviation Security Action Plan (AP-ASAP)	Singapore and Japan
DP/5/9	A Concept for the New Regulation on Air Cargo Security in Thailand	Thailand
DP/5/10	Recent Efforts in the Asia-Pacific Region After APAN-AVSEC	Japan

5.3 DP/5/1 MACAO CHINA'S EXPERIENCE OF PARTICIPATING IN THE ICAO UNIVERSAL SECURITY AUDIT PROGRAMME (USAP)

5.3.1 This paper was presented by Macao, China. Through the assistance of Mainland China, Macao SAR had successfully gained the opportunity and support from ICAO to participate in the 2nd cycle of the USAP in June 2010. A series of preparation works have been done for the USAP, including working group setup, staff training, document and requirements review, amendment and development. Macao SAR has received favorable comments from ICAO auditors on the oversight capabilities and operational aspects of our AVSEC system. Macao China has gained various benefits through the preparation and participation in the USAP, such as increase in recognition and travel public confidence, better understanding of our AVSEC system, more efficient use of resources for AVSEC as well as enhancing the harmonization of aviation security system in the Asia Pacific region. However, Macao China has also experienced that the USAP audit schedule was very intensive. For example, Macao China submitted the most updated MCASTP to the auditors during the audit, and due to the schedule constraint, there was only limited time available for the auditors to conduct a detailed assessment on the programme. Furthermore, for Member States / SAR, like Macao China participating in the 2nd cycle without having gone through the 1st cycle, an extension of audit time would allow for an in-depth assessment on the implementation of operational security measures. This will further enhance the benefits for the audited States/SAR.

5.3.2 The Conference is invited to encourage States to discuss with ICAO during the audit planning stage about the extension of the audit schedule when considered necessary; the Conference is also invited to note the information contained in this paper.

5.4 DP/5/3 THE SUPPLY CHAIN APPROACH TO AIR CARGO SECURITY

5.4.1 The United States presented this paper which provides a brief summary of the recent highlights and areas of concern in air traffic management, aerodromes and flight safety. This paper details the elements of and benefits associated with the use of a supply chain security approach to screening and securing passenger air cargo. A supply chain security approach emphasizes effective security management of the entire air cargo supply chain and provides a flexible approach for governments to increase the security of the air cargo supply chain based on their respective supply chains.

5.4.2 Additionally, this paper illustrates the supply chain security approach through the experience of the United States' establishment of the Certified Cargo Screening Program (CCSP) as an approach to requirements of "The Implementing Recommendations of the 9/11 Commission Act of 2007" (9/11 Act) that mandated 100% screening of cargo transported on passenger aircraft at the piece level, by August 2010.

5.4.3 The Conference is invited to share experiences with implementing a supply chain approach towards securing air cargo; and, discuss existing and developing technologies for the screening of air cargo, particularly for the detection of explosives.

**5.5 DP/5/4 AVIATION SECURITY AS AN INTEGRAL PART OF THE
DGCA AGENDA**

5.5.1 This paper was presented by the United States. The terrorist threat to global aviation is a shared challenge and improving aviation security can be best fulfilled by sharing best practices and exchanging information. DGCA is an invaluable forum and has the potential to make even greater contributions to enhancing regional aviation security. Expanding the time allotted to discussion of aviation security matters may increase the level of engagement of regional states and deliver more productive outcomes. To that end, the United States recommends that aviation security become an integral part of the DGCA.

5.6 DP/5/5 DEVELOPMENTS IN AVIATION SECURITY TECHNOLOGY

5.6.1 Traditional checkpoint security measures are insufficient to detect both metallic and non-metallic threats artfully concealed. As demonstrated by the attempted attack to Northwest Flight 253 on December 25, 2009, it is critical for screeners to employ the most current technology available and practical to their environment in order to identify evolving threats. Both Advanced Imaging Technology (AIT) and Explosive Trace Detection (ETD) offer options to states to enhance security screening at traditionally configured checkpoints.

5.6.2 The purpose of this paper is to provide background on developments in AIT and ETD and the United States' experiences and best practices regarding the deployment of such technology. The Conference is invited to further engage in the discussion regarding aviation security technology by sharing experiences and best practices; committing to continuing the dialogue beyond the DGCA; and making an aviation security technology developments review a part of the aviation security agenda item at future conferences.

**5.7 DP/5/6 AVIATION SECURITY CAPACITY DEVELOPMENT
ACTIVITIES**

5.7.1 This paper was presented by the United States. This paper provides information regarding aviation security training and assistance activities conducted by the Transportation Security Administration's Capacity Development Branch. The purpose of this paper is to provide an overview of the Capacity Development Branch at the TSA Office of Global Strategies. Discussion highlights include aviation security training; Aviation Security Sustainable International Standards Teams (ASSIST); Regional Workshops; Pre-clearance reviews; and targeted projects.

5.8 DP/5/7 AVIATION SECURITY ACTIVITIES IN NEPAL

5.8.1 On Aviation Security, Nepal has made tireless efforts to make ICAO and fellow participants aware with the Nepal's initiatives in enhancing aviation security by complying ICAO Aviation Security standards despite various constraints. Inclusion of aviation security provisions in Civil Aviation Act, adoption of Civil Aviation Security(Management) Rule, National Civil Aviation Security Programme, National Civil Aviation Security Training Programme, National Civil Aviation Security Quality Control Programme, Airport Security Programme are some of the examples that Nepal has set towards such compliances. With due consideration on training needs to respond to the global threat on aviation security, Nepal stresses the need of global harmonization. Threat against aviation security can best be responded through global enhancement of aviation security requiring international support, cooperation and attention to the States facing difficulties in the course of effective compliance of security technology and standard.

5.9 DP/5/8 ASIA-PACIFIC AVIATION SECURITY ACTION PLAN (AP-ASAP)

5.9.1 This Discussion Paper was presented by Singapore and seeks to inform the Asia and Pacific DGCA Conference of the development of an Asia-Pacific Aviation Security Action Plan (AP-ASAP). It also seeks the support of the Asia and Pacific DGCA for the initiatives under this Action Plan and for greater participation and support for the next Asia-Pacific Heads of Aviation Security Regulators Meeting proposed to be held in 2011.

5.9.2 To facilitate discussion on the challenges in international aviation security and to explore opportunities for further collaboration within the Asia-Pacific region, Singapore had convened the Asia-Pacific Aviation Security Regulators' Meeting from 12 to 13 April 2010. Representatives from Australia, Brunei Darussalam, the People's Republic of China, Hong Kong China, Japan, Malaysia, New Zealand, Singapore, Sri Lanka and Viet Nam attended this meeting. Speakers and observers from the Netherlands, the United States of America, the International Civil Aviation Organisation (ICAO) and International Air Transport Association (IATA) were also invited to share on their views and experiences in relation to the challenges arising from the attempted bombing incident on Northwest Airlines flight NW 253 on 25 December 2009.

5.9.3 The meeting discussed and developed an Asia-Pacific Aviation Security Action Plan (AP-ASAP) which contains six key initiatives. The initiatives include promoting the implementation of aviation security measures in a practical manner and in compliance with Annex 17 Standards; promoting information sharing and enhanced risk assessment for effective management of aviation security threat; promoting and enhancing capacity building programmes and training for effective implementation of aviation security measures, promoting the use of modern technology, enhancing air cargo security and collaboration with States and industry.

5.10 DP/5/9 A CONCEPT FOR THE NEW REGULATION ON AIR CARGO SECURITY IN THAILAND

5.10.1 Thailand stated that there are a few problems in the existing regulations on air cargo security, and, therefore, is in the process of issuing a new air cargo regulation to replace the existing one. An air cargo security task force was created by the DCA-Thailand in 2009 with objectives to resolve the regulation which was difficult to implement. The Task Force is composed of all stakeholders including representatives from aviation regulator staff, related government agencies, warehouse companies, postal company, airlines and airports. Thailand

shared with the conference the concept of air cargo security that *all air cargo must be made known before they are loaded on to aircraft*. The security controls over air cargo security shall be made through regulated agents who are responsible for implementing required security measures and who are accepted/approved by the Department of Civil Aviation.

5.10.2 Thailand asked the Conference to share their knowledge, expertise, and experience regarding air cargo security and give inputs and comments on the concept presented in this paper.

5.11 DP/5/10 RECENT EFFORTS IN THE ASIA-PACIFIC REGION AFTER APAM-AVSEC

5.11.1 Japan hosted the Asia-Pacific Ministerial Conference on Aviation Security (APAM-AVSEC) in Tokyo, Japan on March 13, 2010. Ministers and high-level officials from 18 States/administrations in the Asia-Pacific region, and the Secretary General of ICAO participated in APAM-AVSEC and adopted the Asia-Pacific Joint Declaration on Aviation Security. This paper introduces recent efforts made by the participating States/administrations after APAM-AVSEC to enhance aviation security in the Asia-Pacific region. Efforts such as consideration on the deployment of AIT, the promotion of capacity building assistance, the reviewing of national regulations on aviation security, and further enhancement of sharing of information relating to aviation security, have been made by those States/administrations in the last couple of months. The Conference is invited to disseminate the Asia-Pacific Joint Declaration and the recent efforts made by those States/administrations.

5.12 DISCUSSION ON THE PAPERS PRESENTED

5.12.1 In discussing DP/5/4, DP/5/8 and DP/5/10 Australia endorses the main emphasis of the paper presented by the United States and supports the Japan Declaration and the Regulators Meeting that was held in Singapore in April 2010. Australia acknowledges the regional diversity and the significant challenges facing the region. Australia proposes there are three options available to make aviation security an integral part of the DGCA agenda: Parallel track the agenda items at the next DGCA Conference to allow more time for aviation security; have a pre-Conference aviation security meeting that would report to the DGCA Conference and; the ICAO Regional Office to take a leadership role in coordinating Asia and Pacific regions AVSEC regulators meetings.

5.12.2 The President of the Council of ICAO informed the Conference that only two weeks ago the 37th session of the ICAO Assembly adopted a resolution on the continuing ICAO policies related to the safeguarding of international civil aviation against acts of unlawful interference. In January 2011 an ICAO Secretariat paper will be presented to the Council of ICAO to implement this resolution and to review the aviation security action plan. The President of the Council of ICAO requested that States must show a strong commitment to the implement of this resolution. The President of the Council of ICAO also gave a update on the adoption of Amendment 12 to Annex 17.

5.12.3 ICAO Regional Office agreed to coordinate with ICAO HQ to seek policy decisions and directives consistent with the Assembly Resolutions to facilitate a continuing leadership role in increasing the emphasis on aviation security in the region.

5.12.4 The United States, Hong Kong and Malaysia supports the Regulators Meeting that was held in Singapore and the United States commended Japan for the paper on the outcomes of the APAM-AVSEC.

5.12.5 Thailand stated it would prefer parallel series of meetings during the DGCA conference whilst recognizing the increased burden this may have on the host State.

5.12.6 Malaysia supports greater emphasis on aviation security at the DGCA conference and requested a suitable arrangement for discussing aviation security issues in the Asia Pacific region.

5.12.7 In discussing DP/5/3 and DP/5/9 in relation to supply chain approach to Air Cargo Security, New Zealand supported both papers and gave a brief overview of its layered cargo security certification process and the need for flexibility to mitigate risks.

5.12.8 Malaysia recognized the importance of supply chain security and informed the Conference that it is in the final stages of trialing a “secure freight” project (with IATA) and hopes to be in a position to report on the trial at the end of this year.

5.12.9 Australia stated it is currently making improvements to its existing system.

5.12.10 Fiji stated it found the United States paper to be helpful but stressed that for small States it would be difficult to fund such equipment.

5.12.11 In discussing DP/5/6, DP/5/5 and DP/5/7 in relation to training assistance and technological developments in aviation security, Hong Kong thanked the United States for the paper and detailed concerns regarding privacy when using new technology.

5.12.12 Singapore stated it has just finished a one month trial using X-ray backscatter technology and also needed to review its privacy guidance due to the introduction of new technology. Singapore will host an APEC technology workshop in April 2011.

5.12.13 Malaysia supported the United States paper but expressed concern regarding the time taken to go through the Advanced Imaging Technology and asked whether there had been a study on passenger flow. Malaysia has also received objections and unfavorable comments from passengers in relation to the implementation of this new technology.

5.12.14 Australia thanked the United States for its paper and stated that later this year IATA/ACI will host a workshop to examine the screening point of the future.

5.12.15 India complimented the United States for its paper and found it particularly useful in relation to new technology privacy issues and to educate members of the public.

5.12.16 Japan stated that through the ASEAN-Japan project it will continue to assist with capacity development and continue to collaborate with the United States in this area.

5.12.17 PASO requested clarification on the capacity-building training presented by the United States and whether it is available for Pacific States, the United States responded that it would be.

5.13 SUMMATION BY THE MODERATOR

In summarizing the session under Agenda Item 5 (Security), the Moderator highlighted the following:

5.13.1 ICAO presented a Security Briefing which included a presentation of the results of the first cycle and second cycle of audits conducted under the Universal Security Audit Programme (USAP). Information presented compared the performance of the 34 Asia Pacific States audited under this programme against the global average for implementation of the critical elements of a security oversight system.

5.13.2 Nine (9) Discussion Papers were presented under this Agenda Item. The discussion papers fell into three main groups with discussion held following presentation of each group of papers.

- a) the First Group consisted of papers DP/5/4, 5/8 and 5/10. These papers presented respectively by the United States, Singapore and Japan, covered or promoted an increased focus on aviation security for the Asia Pacific region generally and on the agenda of the DGCA Conference particular. In paper DP/5/8, Singapore reported on the work of the Regulator's group on aviation security in April 2010 and the initiatives agreed at the meeting.

In discussion a number of States including Australia, Thailand, New Zealand and Malaysia supported the increased emphasis on aviation security promoted in the US paper. Australia proposed three options for discussion and/or reporting security issues at DGCA Conferences, noting that there were logistics issues involved in two of these. New Zealand favoured separate meetings attended by appropriate specialists under the leadership of ICAO, to maintain a sharp focus on security issues. Further discussion supported the work and initiative of Singapore and Japan in hosting the Regulators' meeting in 2010 and the need to support the 2011 meeting.

An Action Item was proposed, in summing up discussion on this section of the Agenda, noting that there are currently a number of meetings held on aviation security in the region, and that States do not want to add to their workload. An Action Item, supported by the USA, Australia and New Zealand, recognized that ICAO plays an important leadership role in coordinating these meetings and activities in the region and recommended the use of the DGCA Conference as a forum to report back on the results of the meetings for future guidance in the field of aviation security.

- b) The second group of papers, DP/5/3 and DP/5/9, dealt with the supply chain security approach, describing the elements of this approach and the benefits in assuring the secure transport of air cargo. Thailand is presently proposing new regulations to provide for this approach.

In discussion several States supported the adoption of a supply chain security approach and described their experience in implementing or developing it in their systems. New Zealand has certificated 65 air cargo agents and has completed one cycle of audits of these organizations, applying the lessons learned in a second round. Areas for increased attention in the next round, of audits were the training and competence of staff in applying security measures, missing or weak know shipper

procedures and internal QA including authorization systems. Malaysia is conducting a trial of supply chain security which is now in its final stages.

Australia is embarking on improvements to the existing supply chain systems, nothing that high-risk cargo, once screened, becomes low risk. Australia noted that continuity of security was important in the supply chain leading to the aircraft hold. Fiji noted the information provided in the papers and the importance of obtaining the correct equipment to apply the security measures.

- c) papers in the third group, DP/5/6, DP/5/5 and DP/5/7, covered aviation security training and assistance activities, including capacity developments. The second paper presented by the USA, DP/5/5, described developments in aviation security technology and provided information for States on advanced imaging technology, and explosive trace detection procedures.

Several States applauded the sharing of information on technology developments, nothing the role of technology in countering new threats to security. States, including Singapore and Malaysia noted the potential for use of imaging procedures to slow the flow of passengers through screening points and that a balance needed to be found. Australia emphasized the importance of involving IATA, ACI and other international organizations in discussions by authorities on the use of this technology. The three components of good security, in Australia's view, are technology, human factors and the procedures that are applied at airports.

On capacity building PASO acknowledged the value of assistance by the United States (TSA) in the training of security personnel for Pacific Island States.

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AGENDA ITEM 6

AIR TRANSPORT

Macao, China : 25 - 29 October 2010

AGENDA ITEM 6: AIR TRANSPORT

**Moderator: Mr. Alfonso G. Cusi
Director General
Civil Aviation Authority of the Philippines**

6.1 One (1) Discussion Paper and four (4) Information Papers on various topics in air transport were received under this Agenda Item. The following Discussion Paper was presented.

REF.	TITLE	PRESENTED BY
DP/6/1	Air Passenger Rights Regulation	Macao, China

6.2 DP/6/1 AIR PASSENGER RIGHTS REGULATION

6.2.1 This paper was presented by Macao SAR. With a very competitive world airline industry, one would be inclined to think that any airline which did not look after its customers, in what is regarded as a service industry, would likely go out of business. However, at the very least, most passengers would probably agree that the overall level of airline passenger service has declined from what it was even a decade ago. It is in response to this general decline in levels of service that States all over the world started looking at the need to enact rules regarding airline passenger's rights against the airlines. The basic objective of introducing a regulation to address passenger rights, such as the one currently being draft in the Macao SAR, is to assure that a minimum protection for passengers is offered by the airline. This regulation, if enacted, should avoid conflicts arising between passengers and airlines in case of flight disruption. However, as more Governments around the world enact regulation regarding the passenger rights a patchwork of rules governing the issue is arising, creating uncertainty among both airlines and passengers which might generate more operational difficulties for the airlines flying internationally. To ensure that air carriers operate under harmonized conditions in a liberalized international market, the ideal situation would be to have a new, coherent and all-encompassing international, or at least regional, protection for all air passengers so all airlines would abide by the same obligation and all passengers would know their rights, at least, when flying internationally.

6.2.2 The paper invites the Conference to encourage States to adopt regulations regarding the air passenger rights and to consider the possibility of developing a regional common regulation on air passenger rights.

6.3 DISCUSSIONS ON THE PAPER PRESENTED

6.3.1 Canada, India, Indonesia, Republic of Korea, Nepal and New Caledonia expressed support in this undertaking by Macao SAR.

6.3.2 Hong Kong SAR also expressed its support but cautioned the member States to be mindful about possible effects on safety standards by airlines.

6.3.3 Thailand shared that they are implementing Air Passenger Rights for their domestic operations but that most of their riding public are not aware of what their rights as air travelers are; moderator made mention that dissemination of information is also key citing for example Germany where air passenger rights are conspicuously displayed all around the airport terminals.

6.3.4 Malaysia also expressed its support (in principle) but requested to take into consideration the financial implications of this undertaking citing the recent volcanic eruption which effected the European airspace.

6.3.5 Philippines also expressed its support but pointed out that it should be considered that there are member States where there are two types of air carriers: Legacy and Low-cost.

6.4 SUMMATION BY THE MODERATOR

In summarizing the session under Agenda Item 6, the Moderator made the following comments:

6.4.1 The Moderator acknowledged ICAO for sharing various information in regard to Air Transport and suggested that the Information Papers under this Agenda Item are noted by the member States and become part of the Conference.

6.4.2 The relevance and timeliness of the paper presented by Macao SAR entitled Air Passenger Rights Regulation was commended. The presentation garnered a lot of support but caution is still being requested that this is well thought through. The following issues, among other, need to be considered; financial implications on airlines; information dissemination; and ensuring that safety standards are not compromised.

6.4.3 It was noted that most of the member States are already implementing their own Air Passenger Rights on a domestic capacity. A request for the Regional Director of ICAO to study the discussion paper in consideration of the importance of having a regional Air Passengers Rights regulations was also made.

6.4.4 Before closing the session on this Agenda Item, the Moderator acknowledged some support for the use of Air Passengers Rights regulation. It was also further reiterated that it is important for this move to be studied and discussed carefully so that there will be a balance on the financial impact as well as a clear accountability and responsibility for all stakeholders.

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AGENDA ITEM 7

AVIATION AND ENVIRONMENT

Macao, China : 25 - 29 October 2010

AGENDA ITEM 7: AVIATION AND ENVIRONMENT

**Moderator: Mr. Yap Ong Heng
Director General of Civil Aviation
Civil Aviation Authority of Singapore**

7.1 Five (5) Discussion Papers and four (4) Information Papers were received under this Agenda Item. The following Discussion Papers were presented.

REF.	TITLE	PRESENTED BY
DP/7/1	Update on the Asia and Pacific Initiative to Reduce Emissions (ASPIRE)	Singapore
DP/7/2	Sustainable Alternative Aviation Fuels	United States of America
DP/7/3	Aviation and Environment - Hong Kong, China's Perspective	Hong Kong, China
DP/7/5	Voluntary Measures to Address Greenhouse Gas Emissions from Aviation	Japan
DP/7/6	Civil Aviation and the Environment	ICAO

7.2 DP/7/1 UPDATE ON THE ASIA AND PACIFIC INITIATIVE TO REDUCE EMISSIONS (ASPIRE)

7.2.1 Singapore presented this paper. The **ASia and Pacific Initiative to Reduce Emissions (ASPIRE)** is a partnership of air navigation service providers focused on environmental stewardship in the region. The current members are Airservices Australia, Airways New Zealand, Civil Aviation Authority of Singapore (CAAS), the Civil Aviation Bureau of Japan (JCAB) and the Federal Aviation Administration (FAA). ASPIRE is a comprehensive approach to show the Asia Pacific region's leadership through collaboration among its partners towards reducing global aviation emissions by harnessing technological innovation and improvements to flight operational procedures. Under ASPIRE, the partners pledge to adopt and promote best practices that have demonstrated and proven successful in the reduction of greenhouse gases, as well as develop work programs to promote future gains for the environment.

7.2.2 Over the past twelve months, two demonstration flights were conducted utilizing ASPIRE operational procedures, including Dynamic Airborne Reroute Procedures (DARPs) and User Preferred Routing (UPR), to reduce emissions. Overall, the five demonstration flights conducted thus far have shown significant savings in fuel and emissions.

7.2.3 The ASPIRE Strategic Plan has been developed as a living document driving fuel efficiency and emissions reduction management. The 2010-2011 ASPIRE Work Program has also been formulated, with enhancements including the implementation of ADS-B operations over the South China Sea area to further improve surveillance and increase airspace capacity for flights operating between South East Asia and North East Asia, and the launch of "ASPIRE-Daily" aimed at identifying ASPIRE partner city-pair routes that implement three or more ATM Best Practice optimizations on a daily basis. Air navigation services providers along "ASPIRE-Daily" routes are also encouraged to implement ATM best practices where possible to achieve maximum benefits for flights operating in the region.

7.3 DP/7/2 SUSTAINABLE ALTERNATIVE AVIATION FUELS

7.3.1 Sustainable alternative aviation fuels offer environmental, energy-security, and economic-stability benefits for the aviation industry. The United States is making rapid progress towards achieving the technical, environmental, fuel-qualification and specification, and deployment opportunities needed to support sustainable alternative fuels use in commercial jet aircraft, and is working in partnership with government, university, and industry researchers and also with stakeholders through the Commercial Aviation Alternative Fuels Initiative (CAAFI). Partners in the Asia-Pacific region are invited to participate in CAAFI initiatives. Internationally, States and industry are leading a number of efforts to develop, evaluate, demonstrate, qualify for use and commercialize alternative aviation fuels, including environmental and sustainability assessments to confirm, in particular, climate-change benefits. Understanding the sustainability of alternative fuels is a key activity to enable environmental compliance that will allow for deployment and end use of sustainable alternative aviation fuels. Experts from States, international organizations, and industry are working to develop sustainability metrics to assess alternative aviation fuel.

7.3.2 Sustainable alternative fuels for aviation are on the near horizon. CAAFI was able to obtain the first new jet fuel standard approved in the last 20 years. The United States anticipates the approval of a second alternative fuel blend of 50% hydroprocessed renewable jet (HRJ) and petroleum jet fuel by early 2011. The U.S. Environmental Protection Agency finalized this year the U.S. Renewable Fuels Standard (RFS), which mandates volume increases of biofuels in the U.S. fuel supply that expand to 36 billion gallons by 2022. Under the RFS, EPA finalized the GHG lifecycle analysis methodology used to determine eligibility of biofuels to meet the RFS volume mandates. Important commercial steps have also been taken. In late 2009, fifteen U.S. airlines signed pre-purchase agreements with two alternative fuel suppliers to develop long-term purchasing arrangements for both FT and HRJ fuels. In March 2010, U.S. airline and military jet fuel purchasers signed a strategic alliance to align their process and create a “single market” for alternative jet fuel purchasing, sending a strong “demand pull” signal to the market.

7.3.3 The paper requested the Conference to encourage States to collaborate in developing this key technology for aviation and to provide updates on their activities in this area at future Conferences. The Conference also noted the U.S. invitation to participate in CAAFI activities.

7.4 DP/7/3 AVIATION AND ENVIRONMENT - HONG KONG, CHINA'S PERSPECTIVE

7.4.1 Recognizing the importance of minimizing the impact of aviation operations on the environment, Hong Kong, China has been proactive in reviewing procedures and work practices to determine where efficiencies could be gained.

7.4.2 Hong Kong, China has identified several areas, including airspace and flight procedure redesign, maximization of runway utilization and collaborative efforts with airport stakeholders, which can provide substantial improvements in ATM operational efficiency.

7.4.3 Changes have already been effected in some of these areas, while CAD continues to implement planned improvements in other areas in the near to medium terms.

7.4.4 With a significant proportion of Hong Kong operations being long-haul, involving reductions in fuel uplift and flight fuel consumption, many of these initiatives will not only provide environmental benefits to the Hong Kong region but the greater global community.

7.5 DP/7/5 VOLUNTARY MEASURES TO ADDRESS GREENHOUSE GAS EMISSIONS FROM AVIATION

7.5.1 This paper presented by Japan focused on importance of work of ICAO Committee on Aviation Environmental Protection on collecting and releasing information on voluntary measures to address greenhouse gas (GHG) emissions from aviation. ICAO sends a State Letter periodically to all ICAO Member States inviting them to provide information on voluntary measures that have been undertaken. All the information collected is available at ICAO website http://www.icao.int/icao/en/env/Measures/VM_Results_2010.htm. Japan believes that voluntary measures seem to be attractive and useful as a first step toward reduction/mitigation of GHG emissions, and that this kind of database could provide a good reference to the entities which wish to launch or improve environmental activities. Japan encourages stakeholders to provide ICAO with information on their voluntary measures addressing GHG emissions from aviation.

7.6 DP/7/6 CIVIL AVIATION AND THE ENVIRONMENT

7.6.1 This paper presented by the ICAO Secretariat provides an overview of the work of the Committee on Aviation Environmental Protection (CAEP), an initiative by the Secretariat to support the assessment of benefits from operational improvements, and the outcomes of the 37th Session of the ICAO Assembly. ICAO has established three environmental goals for international aviation related to reducing the impact of aviation emissions on global climate and local air quality as well as reducing the number of people exposed to significant aircraft noise. In support of the ICAO environmental goals, CAEP has taken a structured approach of quantifying the environmental impacts and then establishing mitigation measures to address the impacts. CAEP will focus its priorities for the next triennium on 1) the development of a global CO₂ Standard; 2) work on noise stringency; and 3) work on particulate matter.

7.6.2 The Environmental Standards set by ICAO and the investments in technology and improved operational procedures are allowing aviation's noise, LAQ (Local Air Quality), and GHG (Green House Gas) footprints to grow at a rate slower than the demand for air travel. Operational improvements are a key strategy that can be applied to deliver tangible reductions in aircraft fuel consumption. ICAO with the assistance of States and international organizations is developing an easy-to-use tool that is consistent with the CAEP-approved models and aligned with the ICAO Global Air Navigation Plan that can be used to estimate the fuel savings from the implementation of operational improvements. The Conference was informed that ICAO will continue to keep APANPIRG informed of its progress in developing this tool.

7.6.3 The 37th Session of the ICAO Assembly (28 September to 8 October 2010) adopted Resolution A37-18: *Consolidated Statement of continuing ICAO policies and practices related to environmental protection – General provisions, noise and local air quality*, and Resolution A37-19: *Consolidated Statement of continuing ICAO policies and practices related to environmental protection – Climate change*. These two resolutions supersede the previous Resolution A36-22. The new climate change Resolution A37-19 reflects the determination of ICAO's member States to continue to play a leading role in the global efforts to address climate change.

7.6.4 The use of sustainable alternative fuels for aviation is one element of ICAO's comprehensive mitigation strategy to address international aviation emissions. ICAO Global Framework for Aviation Alternative Fuels (GFAAF) is a web-based living document (www.icao.int/AltFuels) that is updated whenever new information is provided by States and international organizations. The Conference encouraged States to exchange information and

best practices through ICAO on the development and deployment of sustainable alternative fuels for aviation.

7.6.5 ICAO is developing guidance and templates to support the preparation of action plans by States and will conduct training in the form of regional workshops in 2011. A workshop for Asia Pacific region is tentatively being planned for May 2011. Active participation of States in the on-going work of CAEP WG2 to update the Circular 303 is crucial since the information contained in the document will play an important basis for States in preparing their action plans for submission to ICAO preferably by end of June 2012.

7.6.6 The outcome of the Assembly on international aviation and climate change will be presented to the UNFCCC Climate Change Conference in December 2010 in Cancun, Mexico. The Conference encouraged States to actively participate and support ICAO's initiatives.

7.7 DISSCUSSION ON THE PAPER PRESENTED

7.7.1 In discussion of DP/7/6 Civil Aviation and the Environment, the United States congratulated ICAO on being able to bring its Members together to adopt a comprehensive, robust and global policy on how to address GHG emissions from international aviation especially since aviation is the only industry that has been able to do so.

7.7.2 Canada and the Republic of Korea also echoed the views of the United States and on their part would continue to work with ICAO on this important issue.

7.7.3 As a result of an inquiry from Hong Kong and Malaysia for further information training workshops and guidance material for the preparation of States action plans, the ICAO President explained that this issue would be discussed at the ICAO Council level in January 2011 and following which ICAO would develop guidance material and templates to support the preparation of State action plans and also organise training seminars in 2011.

7.7.4 In discussion of DP/7/5 Voluntary Measures to address GHG Emissions (by Japan) and DP/7/1 Aspire.

7.7.4.1 In addition to Japan, Hong Kong, Singapore, Indonesia and Malaysia have also instituted voluntary measures to address GHG emissions from aviation. The measures include various ATM Initiatives including in the case of Malaysia implementation of Continuous Descent Approaches (CDAs), airspace realignment etc.

7.7.5 DP/7/2: Alternative Aviation Fuels

7.7.5.1 The Conference expressed thanks to the United States for their informative paper on sustainable alternative aviation fuels. There was a general agreement that development and deployment of sustainable alternative fuels offered much potential benefits for the protection of environment.

7.8 SUMMATION BY THE MODERATOR

In summarizing the five (5) Discussion Papers that were presented and the discussion that ensued the Moderator stated that:

7.8.1 The Conference notes the adoption by ICAO Member States at the 37th Session of the ICAO Assembly of Resolution A37-18 on ICAO policies and practices on noise

and local air quality, as well as Resolution A37-19 on ICAO policies and practices on international aviation and climate change. Resolution A37-19 is the first globally harmonised agreement for addressing CO₂ emissions established by a UN specialised agency for a sector, i.e. ICAO for the international aviation sector. The Resolution is an important achievement and step forward.

7.8.2 Resolution A37-19 reaffirms the leadership of ICAO in addressing international aviation emissions and their impact on climate change. While international aviation contributes only about 2% of total global CO₂ emissions, ICAO Member States and the industry are determined to play their part in tackling international aviation emissions in protecting the environment. Recognising the need for the sustainable growth of the international aviation industry, the Resolution also establishes global aspirational goals and a roadmap for action. The roadmap includes a basket of operational, technological, such as the development of a global CO₂ standard for aircraft engines, and market-based measures for which a framework is being developed.

7.8.3 Reaffirming that the global aspirational goals do not attribute specific obligations to any State, ICAO Member States are encouraged to submit to ICAO their action plans, covering their CO₂ reduction activities and assistance needs. In this regard, the Conference notes the voluntary measures presented specifically:

- The voluntary measures taken by various stakeholders as compiled by Japan, as the Focal Point on Voluntary Measures, in a database;
- The air traffic management initiatives taken or planned by Hong Kong, China and Malaysia;
- The national airspace and air navigation policy and plan being prepared by New Zealand;
- The national action plan being prepared by Indonesia;
- The "Agreement on the Voluntary Activities for GHG emissions reduction" concluded between the Republic of Korea and Korean air carriers; and
- On a multilateral level, the initiatives under the ASPIRE partnership as presented by Singapore, Japan and Australia, who is leading a similar partnership for the Indian Ocean region called INSPIRE.

7.8.4 The Conference also notes the potential presented by alternative aviation fuels in addressing aviation CO₂ emissions; as well as the lead taken by the ICAO and the United States to develop, evaluate, demonstrate, qualify for use and commercialize alternative aviation fuels through the November 2009 ICAO Conference on Aviation Alternative Fuels and the Commercial Aviation Alternative Fuels Initiative (CAAFI) respectively. The Conference further notes the United States' invitation to authorities and industry to participate in CAAFI initiatives.

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AGENDA ITEM 8

**TECHNICAL AND REGIONAL
COOPERATION**

Macao, China : 25 - 29 October 2010

AGENDA ITEM 8: TECHNICAL AND REGIONAL COOPERATION

**Moderator: Mr. Herry Bakti Singayuda Gumai
Director General of Civil Aviation
Directorate General of Civil Aviation, Indonesia**

8.1 Six (6) Discussion Papers and four (4) Information Papers were received under this Agenda Item. The following Discussion Papers were presented.

REF.	TITLE	PRESENTED BY
DP/8/1	ICAO Regional Programmes in the Asia and Pacific Regions	ICAO
DP/8/3	Development of National Civil Aviation Personnel through ICAO Developing Countries Training Programmes	ICAO
DP/8/5	Report on ICAO-Singapore Aviation Academy (SAA) Training Directors Seminar	Singapore
DP/8/6	Pandemic Preparedness Planning for the Aviation Sector	Singapore
DP/8/7	Review of Multilateral Meeting for Enhanced Cooperation Among Asia/Pacific States (MMEC)	Japan
DP/8/9	Technical Cooperation Arrangement between CAA China and CAA Macao SAR, China	Macao, China

8.2 DP/8/1 ICAO REGIONAL PROGRAMMES IN THE ASIA AND PACIFIC REGIONS

8.2.1 The ICAO Secretariat presented this paper. The Technical Co-operation Bureau (TCB) of ICAO operates eight regional / sub regional Programmes in Asia/Pacific to maintain and continuously improve the safety, security and sustainability of aviation. The programmes have common features such as being regional cooperative ventures involving neighbouring States and Administrations, administered by ICAO under the leadership of a Steering Committee. Funding is primarily from Members, with contributions in cash and in kind from various participating Donors and partners.

8.2.2 Cooperative Aviation Security Programme – Asia/Pacific (CASP-AP)

8.2.2.1 The Programme is open to all States and Administrations in the Asia/Pacific Region. The CASP-AP programme has completed Phase I (April 2005 to July 2009) and commenced Phase II (August 2009 to July 2014) and is open to all States/Administrations in the Asia/Pacific Region. The responsibility for regional TCB Programmes including assistance provided under CASP-AP has recently been delegated to the Asia Pacific Regional Office. To date, twenty five States/Administrations have joined the CASP-AP Phase II with Afghanistan signing on in early Oct 2010.

8.2.2.2 The global objectives of the Programme can be summarized as enhancing the security and efficiency of civil aviation in the Asia/Pacific Region through the adoption and harmonization of aviation security legislation and regulations and the enhancement of Members' security oversight capabilities in conformity with Annex 17, the security-related provisions of Annex 9 and the guidance material contained in the Security Manual, ICAO Doc 8973. Statistics derived from audit recommendations following the initial Universal Security Audit Programme (USAP) audit and then the follow-up visit show a significant level of improvement in Annex 17 compliance in the Asia Pacific region and these encouraging results are applicable for the most part to CASP-AP Member States and Administrations which have received assistance from the programme.

8.2.2.3 There is a need for the continuous update of National Civil Aviation Security Programmes and the introduction of new programmes to meet the needs and obligations of Annex 17 and Annex 9, and many States and Administration require further assistance to effectively address their needs. The objectives of Phase II will be to further assist Member States/Administrations in establishing appropriate organization, legislation, processes and procedures to enhance the security of their civil aviation operations, correcting deficiencies identified following ICAO USAP audits, training of AVSEC inspectors, implementation of SARPs under Annex 17 and the security provisions of Annex 9.

8.2.3 Cooperative Arrangement for the Prevention of Spread of Communicable Disease through Air Travel (CAPSCA)

8.2.3.1 The outbreaks of Severe Acute Respiratory Syndrome (SARS) in 2003, Avian Influenza in 2005 and, in 2009, the Influenza A (H1N1) pandemic have highlighted the need for coordinated action by the global aviation community to help prevent and manage the risk of spread, through air travel, of communicable diseases of serious public health concern. The objective of the project is to reduce the risk of spreading influenza that has pandemic potential, and similar communicable diseases, by air travelers. The aim of the CAPSCA project is to bring stakeholders together, especially the aviation and public health sectors, to facilitate collaboration in the development and implementation of relevant ICAO Standards and Recommended Practices (SARPs) and associated Procedures and Guidance material to reduce the risk of spreading influenza. Funding for the project has been in kind from States and international organizations with most costs being met from the UN Central Fund for Influenza Action (CFIA). The achievement/outcomes from CAPSCA-AP Programme include establishment of a Regional Aviation Medicine Team (RAMT) for Asia/Pacific, evaluation visits to State airports, training and establishment of a network of experts and business continuity planning. With regards to ICAO Guidelines some changes to the ICAO Annex 6, Annex 9, Annex 11 and PANS-ATM have been made to better address public health emergencies as part of aviation contingency planning.

8.2.3.2 CAPSCA Asia Pacific recently organized the Global RAMT Meeting in Singapore on 15 and 16 October 2010. The objective of the Global RAMT meeting was to coordinate and harmonize the work of the three active CAPSCA-Projects of ICAO in Africa, the Americas and Asia-Pacific as well as to launch the official website (www.capsca.org) to improve the efficiency of the RAMTs. At the recent 37th ICAO Assembly it was announced that for the triennium 2011-2013, CAPSCA is being introduced into the regular programme of ICAO. To date 16 States and Administrations in the Asia-Pacific have joined the CAPSCA project.

8.2.4 Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs)

8.2.4.1 The COSCAP programme is a forum for promoting continuing dialogue, coordination, and cooperation in matters related to aviation safety among the participating Civil Aviation Administrations, and creating an environment for harmonization, standardization and advancement in safety oversight policies, procedures and regulations. It also provides an efficient and cost-effective method for the conduct of certification and continued surveillance of air operators and for the training of a large number of safety oversight personnel. In addition, it enables Member States to be effective in reducing safety risk through the establishment of Regional Aviation Safety Teams (RAST).

8.2.4.2 First established in South Asia in 1998, further programmes have been launched: COSCAP-South East Asia in 2001, COSCAP-North Asia in 2003, and, globally, other COSCAP type programmes have been established. The COSCAP programmes have had considerable success in improving States safety oversight capabilities in a cost effective manner. COSCAP experts prepare and provide the training, as well as guidance material for use by Member States. Since the 46th DGCA Conference a total of 71 courses, workshops and seminars have been conducted under the auspices of COSCAP(s) programme for which there were 1498 participants.

8.2.4.3 The COSCAP programmes in Asia Pacific closely coordinate their efforts to support Member Administrations in four primary areas/activities as follows: support to strengthen safety oversight programme, developing regulations, standards and guidance material, providing training courses, seminars, workshops and establishment of Regional Aviation Safety Teams. The Regional Aviation Safety Teams (RAST), which have been in place for over seven years, attended by Member State CAAs, air operators, air traffic management staff, ICAO, FAA, EASA, Airbus, Boeing, Bombardier, and the Association of Asia Pacific Airlines (AAPA) are responsible for assisting States with the implementation of the Global Aviation Safety Plan/Roadmap (GASP/R).

8.2.4.4 The COSCAP programmes in Asia Pacific with support and/or in coordination with ICAO, and CASA Australia have developed a Model PBN Regulation and PBN Operational Approval Handbook. Subsequently, PBN Operational Approval Courses were developed and to date four courses have been provided. The COSCAP programmes in Asia Pacific with support and/or in coordination with ICAO, AAIB Singapore, and others have developed Model Accident Investigation Regulations and Model Accident Investigation Policies and Procedures have been finalized and forwarded to Member Administrations. To exchange best practices leading to further harmonization of safety related matters in the region, 12 exchange missions have been conducted between the three COSCAP Programmes in the last year.

8.2.5 Cooperative Agreement for the Enhancement of Meteorological Services for Aviation in the South Pacific (CAEMSA-SP)

8.2.5.1 A 2005 fact finding mission by the ICAO Regional Office to the South Pacific region led to the conception of a project to be run under the ICAO TCB initiative, together with the cooperation of the World Meteorological Organization (WMO). This project became known as the Cooperative Agreement for Enhancement of Meteorological Services for Aviation in the South Pacific (CAEMSA-SP) and was aimed at improving the safety and efficiency of air transport operations in the region by enhancing the meteorological services in the South Pacific.

8.2.5.2 In CAEMSA-SP Phase 1 project the services of an Aviation Meteorological Expert was sourced to identify the MET deficiencies, assist States develop medium and long term action plans for the provision of meteorological services and facilities and improve coordination of stakeholders. The South Pacific States with their limited national budgets would need assistance to contribute towards mitigation of the MET deficiencies. Towards this end, to mitigate MET deficiencies identified in CAEMSA-SP Phase 1, especially remedial action which has a direct impact on the safety and efficiency of flight in the South Pacific. The ICAO Asia Pacific Office with the cooperation of WMO is proposing/coordinating with the TCB for a CAEMSA-SP Phase II Kick-Off Workshop, with the objective to review the findings of the CAEMSA-SP Phase I project and agree with all stakeholders on the way forward (prioritizing remedial action).

8.2.6 Regional Flight Procedure Programme (FPP)

8.2.6.1 To date nineteen States/Civil Aviation Administrations in the Asia and Pacific Regions (ten as Active Participating States/Administrations and nine as User Participating States), have established a Flight Procedures Programme to address instrument flight procedure-related issues. The FPP Programme objective is to assist States to develop sustainable capability in the instrument flight procedure (IFP) domain so as to meet their commitments under Assembly Resolution A36-23 for Performance Based Navigation (PBN) implementation and their obligations for the quality of their IFP's while reducing environmental impact of aviation. In the short period of its existence the following training activities have been carried out: CDO Workshop, PANS OPS Initial Course, PBN Procedure Design Course, and PBN Airspace design workshops. States in the Asia-Pacific Region are encouraged to join the Asia-Pacific Flight Procedure Programme (FPP) to achieve the safety, access, capacity, efficiency and environmental benefits that are possible with PBN implementation.

8.2.7 IFFAS Regional Project – Assistance to South Pacific Island States Aerodrome Certification ANS SMS Implementation

8.2.7.1 At the 19th meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/19) it was concluded that, in recognizing the importance on the implementation of Annex 14 provisions related to aerodrome certification and Safety Management Systems (SMS) in the South West Pacific Small Island States, ICAO considers providing assistance to these States in order to build their capacity to provide the required services in a sustainable and cost efficient manner. Towards this end an ICAO IFFAS grant to be executed by TCB has been approved. The aim of the proposed project in the region/sub-regions will ensure that all aerodrome certification activities and the implementation of SMS are conducted fully complying with Annex 14 Volume 1 SARPs and the relevant guidance material. The project will be based and monitored from the ICAO Regional Office Bangkok, and will include project missions by an expert to participating States. The Regional Office is in the process of finalizing the project document for this project. The project is expected to commence in January 2011.

**8.3 DP/8/3 DEVELOPMENT OF NATIONAL CIVIL AVIATION
PERSONNEL THROUGH ICAO DEVELOPING COUNTRIES
TRAINING PROGRAMMES**

8.3.1 The ICAO Secretariat presented this paper. Recognizing that the safe and efficient operation of air transport systems is to a large part dependent on the skills and knowledge of the national personnel who operate and maintain these systems the Technical Cooperation Bureau (TCB) of ICAO, has been awarding fellowships under the so-called ICAO/Developing Countries Training Programme to a large number of developing States worldwide. Under the framework of a Memorandum of Understanding signed by ICAO with the participating States, the provision of training is funded by the Host States while ICAO prepares for and administers fellowships in terms of information dissemination via ICAO State Letter, and other necessary administrative coordination.

8.3.2 During the year 2009, a total of 362 fellowships were awarded for a range of aviation courses that focus virtually on every aspect of civil aviation. For the year 2010, a total of 472 fellowships are expected to be awarded. Courses are conducted by the national civil aviation training centers in China, the Republic of Korea, Singapore, India and Thailand. It is highly encouraging that over the past years personnel of a large number of civil aviation administrations worldwide take advantage of these training programmes/facilities. Additional States are encouraged to consider hosting such ICAO fellowships, possibly utilizing their State's Official Development Aid resources, to the benefit of the Host State and the recipient State alike. The Technical Cooperation Bureau of ICAO is keen to continue to assist States to enhance the competencies of their national civil aviation personnel through these training programmes/facilities.

**8.4 DP/8/5 REPORT ON ICAO - SINGAPORE AVIATION ACADEMY
(SAA) TRAINING DIRECTORS SEMINAR**

8.4.1 Singapore presented this Paper. This paper highlights the key takeaways from the ICAO-SAA Training Directors Seminar held on 24 - 25 June 2010 at SAA, which included monitoring the developments of ICAO NGAP; moving towards outcome-oriented competency-based training; enhancing training methodologies and promoting greater collaboration among industry stakeholders in areas such as the provision and sponsorship of training, the sharing of professional resources and expertise, as well as the certification of competency and skills.

8.4.2 The seminar was successful in gathering aviation training directors to identify and discuss training needs, priorities and methodologies for the development of aviation personnel in the region. The paper suggests that to continue this momentum, a more permanent coordination mechanism for regular dialogue on aviation human resource development and training needs amongst members of the Asia Pacific region could be established.

**8.5 DP/8/6 PANDEMIC PREPAREDNESS PLANNING FOR THE
AVIATION SECTOR**

8.5.1 This Paper was presented by Singapore. Air travel is the primary mode of the spread of communicable diseases such as SARS and Influenza H1N1. Public health emergencies of international concern (PHEIC) of this type can occur in any part of the world and spread rapidly across the globe with no respect to boundaries. The aviation sector is also invariably the first to be affected by such PHEICs and thus, of necessity, the aviation sector's response to such outbreaks has to be coordinated and harmonized in a timely manner. The CAPSCA (Cooperative Arrangement for the Prevention of Spread of Communicable disease

through Air travel) project is the only project of its kind in the world that is attempting to make this goal a reality.

8.5.2 The aim is to make CAPSCA a Global project with harmonized pandemic preparedness planning and implementation within the global aviation network for any public health emergency of international concern. The CAPSCA project aims to bring stakeholders together, especially the aviation and public health sectors, to facilitate collaboration in the development and implementation of relevant ICAO Standards and Recommended Practices (SARPs), associated Procedures and guidance material. In addition, implementation of the WHO International Health Regulations (2005) at Points of Entry is an important goal of CAPSCA.

8.6 DP/8/7 REVIEW OF MULTILATERAL MEETING FOR ENHANCED COOPERATION AMONG ASIA/PACIFIC STATES (MMEC)

8.6.1 Japan, as the host of the 46th DGCA Conference, organized the Multilateral Meeting for Enhanced Cooperation among Asia/Pacific States (MMEC) with the aim of discussing the possible future measures of enhanced cooperation both among Asia/Pacific States/Administrations and between such States/Administrations and ICAO. Japan, as the coordinator since the 46th Conference, presented to the Conference the information collected and collated based on the questionnaire sent to the concerned parties. Japan also presented several points of discussions for further consideration at the Conference. The Conference expressed their gratitude to Japan for the work, and concluded that DGCA should start discussions on the possible measures in details to strengthen the capability and functions of DGCA Conference.

8.7 DP/8/9 TECHNICAL COOPERATION ARRANGEMENT BETWEEN CAA CHINA AND CAA MACAO SAR, CHINA

8.7.1 The size and human recourse of Macao, China aviation industry is limited and CAA Macao, China is also an operator or service provider in some parts of the aviation industry. CAA Macao, China will establish the safe oversight mechanism through the Technical Cooperation Arrangement with CAA China for an improved Macao safety system. Although CAA China provides consultancy services on some parts of the oversight function, the responsibility for the safe, regular and efficient conduct of aviation activities still remains with CAA Macao, China. Small or medium size CAA organizations can also consider establishing similar safety oversight mechanism with other states or international cooperation programs to reduce cost while maintaining qualified independent inspectorate staff.

8.8 DISCUSSIONS ON THE PAPERS PRESENTED

8.8.1 Several States namely India, Philippines and Nepal expressed grievances on the handling of country specific TCB projects especially with regard to coordination procedures, project management functions of TCB as well as the quality control of the various TCB projects. There were requests to clarify and better integrate the Regional Office and TCB coordination and integration functions.

8.8.2 Nepal, Fiji and Malaysia thanked the ICAO and the various donor States who have offered fellowships to their nationals and look forward for further opportunities as this provided an avenue for building capacity. Malaysia indicated their intention to offer fellowships under the framework of ICAO Developing Countries Training Programme from 2011.

8.8.3 There was general consensus and support to the idea of institutionalization of an aviation training directors' forum on a biennial basis.

8.8.4 With regard to the Multilateral Meeting for Enhanced Cooperation among Asia/Pacific States (MMEC) it was noted that there are strong reservations among some States on an alternative to the DGCA Conference, given the diversity among States in the region and the additional resources required for a more permanent body. Conference noted the establishment of a Working Group (WG) to further discuss the issues raised in Japan's paper on promoting greater coordination in the DGCA Conference taking into consideration the key ingredients that have made the DGCA Conference successful such as its focus on operational and technical areas and effective decision making mechanism through action items of the conference. The WG could also discuss the relationships and coordination between the DGCA Conference and the Montreal Group as well as between the DGCA Conference and the various ICAO technical bodies to provide greater clarity and avoid duplication. In the meantime Macao agreed to continue the work of the MMEC.

8.9 SUMMATION BY THE MODERATOR

 In summarizing the session under Agenda Item 8 the Moderator made the following comments.

8.9.1 States are encouraged to actively participate in the regional cooperative programmes under the auspices of ICAO. Since this is an ongoing process and activity, the action items from the 46th DGCA Conference are still relevant and should be carried forward to this year.

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AGENDA ITEM 9

OTHER BUSINESS

**A: Theme Topic for the 48th
Conference of DGCA's**

**B: Endorsement of Action
Items Arising from the
Present Conference**

C: Any Other Matter

**47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions**

AGENDA ITEM 9: OTHER BUSINESS

**Moderator: Air Cdre. Mahmud Hussain, ndu, psc.
Chairman
Civil Aviation Authority of Bangladesh**

9.1 Six (6) Discussion Papers were received under this agenda item and all six (6) papers were presented:

REF.	TITLE	PRESENTED BY
DP/9a/1	Possible Theme Topic for the 48th Conference of Directors General of Civil Aviation, Asia and Pacific Regions	ICAO
DP/9a/2	Proposal on Theme Topic for 48 th Conference of Directors General of Civil Aviation Asia and Pacific Regions	France
DP/9b/1	List of Action Items Arising from the 47 th Conference	ICAO
DP/9c/1	Schedule of Meetings/Seminars/Worskhops to be Convened in 2011 by the ICAO Asia and Pacific Office	ICAO
DP/9c/2	Schedule of Conferences of DGCAs in the Foreseeable Future	ICAO
DP/9c/3	Scheduling of DGCA Conferences Being Held in the Same Years as ICAO Assemblies	Australia

a) Theme Topic for the 48th Conference of DGCAs

9.2 DP/9a/1 POSSIBLE THEME TOPIC FOR THE 48th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

9.2.1 The ICAO Secretariat in presenting the paper, informed that it has become a practice in recent years to select a theme topic for the next Conference of DGCAs, in order to allow adequate time for the invitees to prepare papers for deliberation. It has also become customary for a topic to be proposed on the basis of informal consultations and for the Conference to agree to one theme topic by consensus. The focus of attention therefore should be on a subject of crucial importance to Directors General of Civil Aviation, Asia Pacific Region and events facing the world of aviation. In assisting the Directors General to reach a consensus on the Theme Topic for the 46th Conference of DGCAs, a list of previous Theme Topics discussed at previous Conference was provided.

9.3 DP/9a/2 PROPOSAL ON THEME TOPIC FOR 48th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

9.3.1 This Discussion Paper presented by France proposes “Sharing experience to enhance safety and to increase air navigation efficiency in the oceanic zones” as the theme topic for the 48th Conference of the Directors General of Civil Aviation of the Asia/Pacific Regions which will be hosted by New Caledonia, France in 2011.

9.3.2 The paper acknowledges that all the countries of the Asia Pacific Regions share the common objective to achieve safe, secure, regular and environmentally sustainable aviation. Over time Conferences of the Asia Pacific DGCAs allowed constructive exchanges on many aspects of this very wide objective. France proposes that the 48th Conference focuses its attention on a specific subject, the safety and the efficiency of operations in the oceanic zones.

9.3.3 As far as air navigation is concerned, new equipments and techniques offering new opportunities include new generation of Air Navigation Systems. In addition, these new techniques and new tools should have a positive impact on safety and the environment, specially as they allow to optimize the flight length, and consequently to reduce the quantity of fuel burnt and aircraft gas emissions.

9.3.4 France expects that the proposed theme topic should allow to exchange views on the expectations of the participants regarding these new developments and to identify opportunities for the development of new regional or sub-regional cooperation and partnerships to find new ways to be more pertinent and successful in coping with the global needs in order to face the challenges ahead.

9.3.5 France also expects that the proposed theme topic will allow participants to share information and exchange experience and opinions on various aspects of the operations in the oceanic zones, including air navigation, aviation safety which raises specific problems in oceanic zones and also on the development of an environmentally sustainable aviation.

9.4 DISCUSSIONS AND SUMMATION BY THE MODERATOR

The Moderator summarized the Discussion Papers presented and the discussion as follows:

9.4.1 The Moderator stated that Conference was expected to decide possible Theme Topic for the 48th Conference of DGCAs to be held in New Caledonia in 2011. France proposed the theme topic under the title “Sharing Experience to Enhance Safety and to Increase Air Navigation Efficiency in the Oceanic Zone”. The theme topic was generally considered appropriate and relevant, however, Nepal and ICAO suggested that the scope of the topic be widened to include the entire APAC region. Malaysia suggested that as part of maritime security, the aspect of Search and Rescue (SAR) should also be incorporated as one of the sub-themes. Since, SAR could be discussed as a separate but integrated issue within aviation safety, the focused/expanded theme topic agreed upon was *“Sharing information and experiences to enhance safety and efficiency of Air Navigation Services (ANS) in the Asia-Pacific with specific reference to Oceanic Zones”*.

b) Endorsement of Action Items arising from the Present Conference

9.5 DP/9b/1 LIST OF ACTION ITEMS ARISING FROM THE 47th CONFERENCE

9.5.1 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 16 Action Items emanating from the 47th Conference. The *List of Action Items* is attached as **Appendix A** to this Report.

9.5.2 In summing up the discussion on Agenda Item 9b the Moderator requested the States / Administrations to act upon the agreed Action Items and provide ICAO Asia and Pacific Office with their respective status of implementation within the stipulated period. The Moderator also requested that the agreed *List of Action Items* be posted on the Conference website at the earliest.

c) Any Other Matter

9.6 DP/9c/1 SCHEDULE OF MEETINGS/SEMINARS/WORKSHOPS TO BE CONVENED IN 2011 BY THE ICAO ASIA AND PACIFIC OFFICE

9.6.1 The ICAO Secretariat presented a tentative schedule of meetings, seminars and workshops planned to be convened in 2011 by the ICAO Regional Office for the Asia and Pacific regions. The information is presented to States and International Organizations for advance planning/budgetary purposes only and may be subject to change. A formal letter of invitation will normally be issued at least 2 months prior to each event. Other special co-ordination and task force/working group meetings will also be convened during the year 2011, as necessary.

9.7 DP/9c/2 SCHEDULE OF CONFERENCES OF DGCA's IN THE FORESEEABLE FUTURE

9.7.1 The ICAO Secretariat presented this paper and stated that several Administrations had expressed their interest and desire to host the annual Conference of Directors General of Civil Aviation, Asia and Pacific Regions. The Conference was also informed of Maldives inability to host the 49th DGCA Conference in 2012. India and the Republic of Korea offered to host the Conference instead. On the basis of consultations with States the following schedule was developed:

48 th Conference in New Caledonia, France	10 – 14 October 2011
49 th Conference, India	2012
50 th Conference in Thailand	2013
51 st Conference in China, Hong Kong	2014
52 nd Conference in Pakistan	2015

9.7.2 The Conference thanked the member States for their offer to host the DGCA's Conference over the next five years.

9.8 DP/9c/3 SCHEDULING OF DGCA CONFERENCES BEING HELD IN THE SAME YEARS AS ICAO ASSEMBLIES

9.8.1 Australia in its paper stated that when DGCA Conference and the ICAO Assembly fall within the same year, preparations for both meetings can place significant strain on the scarce resources of Civil Aviation Administrations. Also, scheduling the DGCA Conference after the ICAO Assembly precludes the opportunity to use the DGCA Conference to consider matters with a view to their consideration at the Assembly. In the interests of efficiency and effectiveness, this paper proposes that the DGCA Conference should precede the ICAO Assembly when both fall within the same year.

9.9 DISCUSSIONS AND SUMMATION BY THE MODERATOR

The Moderator summarized the Discussion Papers presented and the discussion as follows:

9.9.1 The ICAO Regional Director provided a tentative schedule of meetings, seminars and workshops to be convened in the year 2011 by ICAO Regional Office for the Asia and Pacific regions. The planning to the ICAO strategic objective and creating awareness at regional level. The Conference appreciated the ICAO Regional Office efforts the promote greater awareness at the regional level.

9.9.2 The members thanked New Caledonia, France who would be hosting 48th DGCAs Conferences in Noumea, New Caledonia from 9 – 14 October 2011.

9.9.3 Australia suggested that States consider the merits of scheduling future DGCA Conference to commence not less than three (3) months, but not more than six (6) months, prior to the opening session of ICAO assembly. There was a lot of deliberations supporting Australia's proposal. Canada, Philippines, Republic of Korea and Hong Kong SAR extended their support. The ICAO Secretariat, however, highlighted the problems of remaining too rigid on the time-line of not less than 3 month and not more than six months. There was a need for greater flexibility keeping in view other major events taking place related to civil aviation at both the regional and global levels. Due consideration was also required to be given to the major meetings being held at ICAO HQs.

9.10 MISCELLANEOUS

9.10.1 The Regional Director requested the States that were yet to provide their share of contribution to the ICAO budget to release their annual assessments to ICAO as soon as possible.

9.10.2 In addition, the Regional Director drew the attention of the Conference to two Electronic Bulletins that were recently issued on 28 September 2010: the ICAO Civil Aviation Training Policy (EB2010/40); and the Establishment of the Safety Fund (EB2010/43). The Regional Director informed that ICAO has adopted a new training policy featuring an endorsement process of training organizations and training courses. The new training policy addresses all areas of aviation safety and security and will complement the work of the Next generation of aviation Professionals (NGAP) Task Force. The civil aviation training policy will be supplemented by an endorsement package including specific criteria which will be developed by the end of 2010. Training institutions that are currently endorsed will be reassessed within the next triennium. The Regional Director further informed that the Safety Fund (SAFE) has been established by the Council of ICAO with the intention of improving the safety of civil aviation through the use of performance-based approach to providing assistance.

This approach will ensure that voluntary contributions to the Fund are used responsibly and in a timely manner, while limiting administrative costs. The performance-based approach will also ensure that the Council of ICAO is kept fully informed of the status of all projects funded by SAFE. Voluntary contributions to SAFE will be accepted from ICAO Member States, international organizations and public and private parties associated with international civil aviation, and may be either general or specified.

9.10.3 Referring to the 47th DGCA Conference Draft Report, the Regional Director requested the participants to kindly advise the ICAO Asia Pacific Office of any alterations, amendments or corrections that may be required within two weeks time so that the Final Report may be issued at the earliest.

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

CLOSING REMARKS

Macao, China : 25 - 29 October 2010

CLOSING REMARKS

1. In his closing remarks the ICAO Council President, Mr. Roberto Kobeh González expressed complete satisfaction with the outcome of the 47th Conference of the Directors General of Civil Aviation Asia and Pacific regions. The President was very pleased to note that important issues were considered and discussed in a very forthright and proficient manner. The high quality of deliberation speaks of the commitment of the States in the Asia and Pacific regions. The President further stated that at the recently concluded ICAO Assembly Session some important decisions have been taken in the areas of safety, security, environment and the future training needs. Implementation of the Assembly Resolutions was the key to success and he looked forward to complete cooperation amongst the States as only through effective cooperation would States be able to achieve sustainable development in civil aviation at the global level. Likewise the effective implementation of Action Items arising from the 47th DGCA Conference was equally important. Speaking of regional organizations, the President informed the Conference that at the recent ICAO Assembly Session a few Memorandums of Cooperation (MOC) were signed amongst the regional organizations in the Middle East, Africa, Europe and Latin America on matters of technical cooperation and sharing of information. He stressed that sharing of information is a win win situation. The President expressed his view that at the present time there was no such formal regional organization in existence in the Asia and Pacific regions. There is a need to boost the coordination with the Montreal Group and use the DGCA platform to establish meaningful dialogue on various matters with other regional organizations. This is the way forward to improve cooperation on many issues of global significance. Mr. Roberto Kobeh González commended the President of the Civil Aviation Authority of Macao and the staff involved for their excellent efforts in arranging the 47th DGCA Conference. The President also applauded the support provided by the ICAO Asia Pacific Office in the conduct of the Conference.

2. Mr. Simon Chan Wang Hong, President, Civil Aviation Authority of Macao and Chairperson of the Conference thanked all participants for their excellent support in ensuring the success of the Conference. The Chairperson stated that the Action Items arising from the Conference and the issuance of the Macao Statement were manifestation of the success of the Conference. The Chairperson thanked the staff of the Macao Civil Aviation Authority for their dedicated hard work, commitment and working together as a team. The Chairperson also thanked the ICAO Asia Pacific Office for its support in the conduct of the Conference.

3. The Regional Director thanked the Government of Macao SAR and the Civil Aviation Authority for the warm hospitality and sophisticated arrangements. The generosity and magnanimity displayed by the host were highly appreciated by all participants. Commenting on the Theme Song developed and sung by the staff of the Macao CAA, the Regional Director stated that this was a unique item that was presented and will not be forgotten for long. The Conference brought us together and we will continue to work together.

3.1 The Regional Director praised the leadership of the Chief Executive of Macao SAR and thanked the Secretary for Transport and Public Works of Macao SAR for his opening remarks which set the pace for the Conference. The Regional Director also expressed his gratitude to the President of ICAO Council, the Deputy Director of the Liaison Office of the Central People's Government in Macao SAR, the Commissioner of the Office of the Ministry of Foreign Affairs of the People's Republic of China for the presence at the Conference.

3.2 Speaking of the Macao Statement the Regional Director suggested that this could be the starting point as it signifies the commitment of the Conference to undertake responsibilities to bolster civil aviation in the Asia and Pacific regions.

**47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions**

3.3 In conclusion the Regional Director thanked all States and International Organization for the support and contribution to the success of the 47th DGCA Conference.

4. On behalf of all the delegates the Director General of the Department of Civil Aviation Malaysia thanked Macao SAR for the excellent meeting arrangements and the wonderful and warm hospitality over the week.

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

APPENDICES

Macao, China : 25 - 29 October 2010

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

APPENDIX A

LIST OF ACTION ITEMS

Macao, China : 25 - 29 October 2010

LIST OF ACTION ITEMS ARISING FROM THE 47th CONFERENCE

	<u>Agenda Item 3: Air Navigation Planning and Implementation</u>
Action Item 47/1	Given the global and trans-boundary nature of air traffic flows the Conference recognizes the need for ATM Contingency Plans to be developed in consonance with ICAO Annex 11 and requests the ICAO APAC Office to consider the establishment of a Task Force for planning, coordination and implementation of a regional ATM contingency plan.
Action Item 47/2	Recognizing the lack of response to the ICAO State Letter Ref: AN 13/2-2010/31 dated 29 March 2010, requesting States to inform the ICAO APAC Office of actions completed toward implementation of the PANS-ATM provisions regarding the NEW flight plan content, the Conference urges States and Administrations which have not yet done so, to provide planning and implementation data of their New Flight Plan Format to the ICAO FITS website.
Action Item 47/3	To enable timely implementation of the new Flight Plan Format the Conference urges States/Administrations and Service Providers in the APAC Region to follow the Asia/Pacific transition period adopted by the APANPIRG Flight Plan and ATS Messages Implementation Task Force.
Action Item 47/4	Noting the lack of completion of State PBN Implementation Plan in the APAC Region and in keeping with the ICAO Assembly Resolution A37-11, the Conference urges States/Administrations that are yet to develop their plans, to complete a State PBN implementation plan as a matter of urgency to achieve the timelines and intermediate milestones and: <ul style="list-style-type: none"> a) requests States/Administrations to identify the focal point, consider deploying some resources to the PBN implementation plan and ensure the responses made within the deadline; b) submit their plans to the ICAO APAC Office at the earliest; and c) requests the ICAO APAC Office to initiate a questionnaire to find out the problem/issues faced by States in not being able to submit a State PBN Implementation Plan.

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Appendix A

Action Item 47/5	<p>The Conference urges States/Administrations to:</p> <ul style="list-style-type: none"> a) maintain continuous Civil and Military coordination as greater participation of military authorities in civil forums is necessary to facilitate optimum utilization of airspace; and b) consider including their military counterparts in their delegations whenever possible.
	<u>Agenda Item 4: Aviation Safety</u>
Action Item 47/6	<p>States supported the establishment of the Regional Aviation Safety Group – Asia Pacific (RASG-APAC) subject to reconciliation of the TORs of the COSCAPS and the RASG-APAC to avoid duplication. The Conference requests the ICAO APAC Office to circulate the DGCA-47/DP/4/3 (Establishment of Regional Aviation Safety Group in Asia Pacific) to the three COSCAP Steering Committees, PASO and other members of APAC for review. The Conference further requests the Regional Director of ICAO Asia Pacific Office to present the paper to the COSCAPS Steering Committee Meetings and to take leadership role in formulating necessary future actions based on the views of all States/Administrations in the region. The final document is to be circulated to all APAC States/Administrations.</p>
Action Item 47/7	<p>To develop and maintain the expertise of an Accident Investigator, the Conference agrees with the proposal submitted in DGCA-47/4/11 paper (Training Investigators and Maintaining their Expertise). The Conference, however, requests ICAO APAC Office to present this proposal to the COSCAPS Steering Committees for consideration.</p>
Action Item 47/8	<p>Taking note of the SARPs established in the related ICAO Annex and guidance provided in ICAO documents, the Conference emphasised upon the States/Administrations on the need to establish a State Safety Programme in order to achieve an Acceptable Level of Safety (ALoS) in civil aviation. The ALoS to be achieved shall be established by the State. (Annexes 6, 11 and 14)</p>

	<u>Agenda Item 5: Aviation Security</u>
Action Item 47/9	<p>Noting that an aviation security Regulators Meeting is already proposed for 2011 in Singapore, the Conference urges States/Administrations to send their appropriate specialists to the next Regulators Meeting in 2011 in Singapore. The Conference further requests that:</p> <ul style="list-style-type: none"> a) ICAO play an increased leadership role in this Regulators Meeting to ensure that matters are progressed consistent with the 37th ICAO Assembly Resolutions; and b) Reports from the Regulators Meeting are presented to the DGCA Conference. <p>In order to have a unified approach in tackling aviation security issues and bolstering cooperation in this regard in the Asia Pacific region the Conference agrees to request ICAO through the DGCA platform to provide leadership and direction on aviation security matters consistent with the 37th Assembly Resolution.</p>
	<u>Agenda Item 7: Aviation and Environment</u>
Action Item 47/10	<p>Looking that the global aspirational goals do not attribute specific obligations on States, to mitigate aviation impact on climate change in accordance with Assembly Resolutions A37-18 and A37-19, the Conference encourages States to:</p> <ul style="list-style-type: none"> a) actively participate in ICAO's work on developing guidance for the preparation of State action plans, including attending the ICAO workshop for the Asia Pacific region, and to develop and submit action plans to ICAO by the end of June 2012; and b) undertake or enhance voluntary activities, including in partnership with other States, to address international aviation CO₂ emissions and to share information on these activities.
Action Item 47/11	<p>Noting the potential presented by alternative aviation fuels in addressing aviation CO₂ emissions, the Conference encourages States to collaborate and to exchange information on the development and deployment of sustainable alternative fuels for aviation.</p>

	<u>Agenda Item 8: Technical and Regional Cooperation</u>
Action Item 47/12	<p>Recognizing the technical assistance requirements of Member States/Administrations in fulfilling their obligations for the effective safety and security oversight of aviation activities taking place under their jurisdictions, and making note of the enormous potentials in the Regional Cooperative Arrangements to help solve such situations, the Conference requests :</p> <ul style="list-style-type: none"> a) the States to actively participate at the various ongoing Regional Technical Cooperation Programmes such as CASP-AP, CAPSCA-AP, COSCAPs, CAEMSA-SP, etc; b) the States to make the optimum use of the opportunities, facilities or services provided by such Programmes or Projects to meet their national requirements including the staff training; and c) the international agencies and donor community to continue extending their support in cash and/or in kind for the continued implementation of the Regional Cooperative Programmes.
Action Item 47/13	<p>Acknowledging the acute shortage of trained and qualified aviation technical personnel and recognizing the potential benefits for building capacity in receiver States and also for building the capability of host State aviation training institutions, the Conference requests:</p> <ul style="list-style-type: none"> a) States/Administrations having necessary resources and expertise to join the ICAO Developing Countries Training Programmes in order to provide assistance to States for training of national staff; and b) the Developing States to make use of the opportunities provided under the ICAO Developing Countries Training Programmes for training of their national staff as and when they are made available.
Action Item 47/14	<p>Taking note of the outcomes of the Aviation Training Directors Forum in Singapore and considering the suggestion to institutionalize the forum the Conference requests the ICAO APAC Office to coordinate the efforts of a biennial meeting of the Aviation Training Directors Forum. States interested to host the next forum in 2012 are requested to officially advise the ICAO APAC Office of their intent.</p>

Action Item 47/15	Considering the merits of CAPSCA Programme outlined in the DGCA-DP47/8/6 (Pandemic Preparedness Planning for the Aviation Sector), the Conference urges States/Administrations to join up as members of CAPSCA-AP, in view that CAPSCA has now been designated as a regular programme of ICAO for the triennium 2011-2013.
	<u>Agenda Item 9: Other Business</u>
Action Item 47/16	Taking cognizance of the difficulties mentioned in the DGCA-47/DP/9c/3 (Scheduling of DGCA Conferences being held in the same years as ICAO Assemblies) paper, the Conference agrees that during an ICAO Assembly year, the DGCA Conference should be held in a reasonable timeframe before or after the ICAO Assembly, noting that this may require some adjustments to the rescheduling of other related regional meetings.

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APPENDIX B

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APPENDIX C

**LIST OF
DISCUSSION AND INFORMATION
PAPERS**

Macao, China : 25 - 29 October 2010

LIST OF DISCUSSION AND INFORMATION PAPERS

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	<i>“Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation”</i>	
DP/1/1	Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation	ICAO
IP/1/2	Air Transport in Europe and in France: Is the Crisis Over?	France
DP/1/3	Working Together for the Recovery and Enhanced Development of Aviation	Macao, China
AGENDA ITEM 2 : REVIEW OF ACTION ITEMS ARISING FROM THE 46th CONFERENCE		
DP/2/1	Responses from Administrations to Action Items Arising from the 46th Conference of Directors General of Civil Aviation, Asia and Pacific Regions	ICAO
DP/2/2	ICAO on Seamless Sky - ATM	ICAO
IP/2/3	CAAC's Preparation for the WRC-12	China
DP/2/4	Update on the Asia Pacific Consultative Link (APCL)	Singapore
IP/2/5	Annual Report of Montreal Group of Asia-Pacific States on the Council of ICAO	Montreal Group of Asia-Pacific States on the Council of ICAO

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DP/3/1	APANPIRG Activities - Outcomes of APANPIRG/21	ICAO
DP/3/2	Review Outcomes of APANPIRG/21 on the Implementation of the New Flight Plan Format	ICAO
IP/3/3	FPP Update	ICAO
IP/3/4	Relevant Development in Air Navigation Field	ICAO
IP/3/5	Implementation of New ICAO Flight Plan (FPL) Provisions	ICAO
IP/3/6	U.S. GPS Performance Commitment Including CNS/ATM Implementation Activities	United States of America
IP/3/7	Unmanned Aircraft System (UAS) Operational and Certification Issues	United States of America
IP/3/8	Automatic Dependent Surveillance - Broadcast (ADS-B)	United States of America
IP/3/9	Transition from AIS to AIM	China
DP/3/10	An Update on ADS-B Implementation in the South China Sea	CANSO
DP/3/11	CANSO's Seamless Airspace Guidance Document	CANSO
DP/3/12	Promoting ATM Industry Best Practices in the Asia Pacific Region	CANSO

REF.	TITLE	PRESENTED BY
DP/3/13	New Meteorological Services Supporting Air Traffic Management	Hong Kong, China
DP/3/14	PBN Development in Hong Kong, China	Hong Kong, China
IP/3/15	SES Air Traffic Management Research (SESAR)	France
IP/3/16	New Zealand Airspace and Air Navigation Policy and Planning	New Zealand
IP/3/17	CNS/ATM Implementation	Myanmar
IP/3/18	The Long-term Vision for the Future Air Traffic System in Japan (CARATS)	Japan
DP/3/19	Regional ATM Contingency Plan	Singapore
IP/3/20	Modernization of CNS/ATM and Aerodrome Facilities in Macao, China	Macao, China
DP/3/21	Development of Action Items for Transition from AIS to AIM	Republic of Korea
DP/3/22	Performance Based Navigation (PBN) Implementation Status in Nepal	Nepal
IP/3/23	U.S. Next Generation Air Transportation System (NextGen)	United States of America
DP/3/24	Status of PBN Implementation in the Asia Pacific Region	ICAO
DP/3/25	Civil/Military Co-ordination	ICAO
DP/3/26	Delay in GNSS Implementation	ICAO

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IP/3/27	Indonesia's ATM Master Plan Programme	Indonesia
IP/3/28	Performance-Based Navigation	Australia
IP/3/29	Air Navigation Planning and Implementation Status	Mongolia
IP/3/30	Consideration in Implementation of New CNS/ATM in the Republic of Korea	Republic of Korea
IP/3/31	New Surveillance System Implementation Program for Low Altitude Airspace in the Republic of Korea	Republic of Korea
IP/3/32	ATN/AMHS implementation activities in the Republic of Korea	Republic of Korea
IP/3/33	R&D Activities on ADS-B & GBAS in the Republic of Korea	Republic of Korea
IP/3/34	Updates Air Navigation Activities in Viet Nam	Viet Nam

AGENDA ITEM 4 : AVIATION SAFETY

IP/4/1	The Continuous Monitoring Approach and New Initiatives to Assist States - Briefing to the 47th Annual Conference of Directors General of Civil Aviation of the Asia and Pacific Region	ICAO
IP/4/2	Implementation of the ICAO Language Proficiency Requirements	ICAO
DP/4/3	Establishment of Regional Aviation Safety Group (RASG-APAC) in Asia and Pacific	ICAO
DP/4/4	Training Profiles and Corresponding Required Training to Meet ICAO Safety Oversight Obligations for Qualified Technical Personnel	United States of America

Macao, China : 25 – 29 October 2010

REF.	TITLE	PRESENTED BY
DP/4/5	Airfield Safety in the United States	United States of America
DP/4/6	Development Status of Language Proficiency Requirements and Challenges in Nepal	Nepal
DP/4/7	ANS Safety Management the Experience of Hong Kong, China	Hong Kong, China
DP/4/8	Airport Compatibility and Readiness for B747-8F Operations - the Hong Kong China Experience	Hong Kong, China
DP/4/9	Planning for SEA Search and Recovery Operations - A Small Investigation Agency's Perspective	Singapore
IP/4/10	Management of the Yasur Volcano Eruption by the Civil Aviation Service of New Caledonia	France
DP/4/11	Training Investigators and Maintaining Their Expertise	China, France and Mongolia
IP/4/12	French Initiative to Reduce Delay to Localize Activated Emergency Locator Transmitter (ELT) for SAR Operations	France
IP/4/13	International Accident Investigation Forum and APEC Capacity Building Workshop on Air Accident Investigation	Singapore
IP/4/14	Development of the State Safety Programme: Issues and Challenges in the New Zealand Context	New Zealand
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DP/4/20	Considerations in Transition to the Implementation of State Safety Programme (SSP) Environment	Republic of Korea
DP/4/21	Safety Plan for UAS in the Republic of Korea	Republic of Korea
DP/4/22	Widening the Cooperation in the Region in Sharing of Safety Information Developed by Foreign Operator Inspection	Republic of Korea
DP/4/23	Review of Regulatory Framework for the Use of Portable Electronic Devices (PEDs) on Board in the Aircraft	Republic of Korea
IP/4/24	Provision of the Rapid Exit Taxiway Indicator Markings	Republic of Korea
DP/4/25	Aviation Safety Activities in Nepal	Nepal
IP/4/26	Report on Outcomes of Initiatives Regarding Next Generation of Aviation Professionals	ICAO
DP/4/27	Status of Implementation of Enhanced Airfield Markings in Macau International Airport	Macao, China
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IP/4/29	Utilization of Electronic Tools for Safety Management in Response to ICAO's New Safety Strategy	Republic of Korea

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AGENDA ITEM 5 : AVIATION SECURITY		
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IP/5/2	Long-term Development Plans of the Republic of Korea for Civil Aviation Security	Republic of Korea
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DP/5/4	Aviation Security As an Integral Part of the DGCA Agenda	United States of America
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DP/5/7	Aviation Security Activities in Nepal	Nepal
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IP/6/2	The Work Plan of ICAO for the Next Triennium in the Field of Air Transport Regulation and Liberalization	ICAO
IP/6/3	Infrastructure Management Programme	ICAO
IP/6/4	ICAO Database of the World Air Services Agreement (WASA)	ICAO
IP/6/5	Scope and Future of the ICAO Statistics Activities	ICAO
IP/6/6	Viet Nam Aviation Market in the year 2009 escaping from Crisis	Viet Nam

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AGENDA ITEM 7: AVIATION AND ENVIRONMENT		
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DP/7/3	Aviation and Environment - Hong Kong, China's Perspective	Hong Kong, China
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DP/7/5	Voluntary Measures to Address Greenhouse Gas Emissions from Aviation	Japan
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IP/7/9	Voluntary Initiative on GHG Reduction in the Republic of Korea	Republic of Korea
AGENDA ITEM 8 : TECHNICAL AND REGIONAL COOPERATION		
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IP/8/4	Working Together Through Joint Maintenance Management	Hong Kong, China
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DP/8/6	Pandemic Preparedness Planning for the Aviation Sector	Singapore
DP/8/7	Review of Multilateral Meeting for Enhanced Cooperation Among Asia/Pacific States (MMEC)	Japan
IP/8/8	Enhancement of International Cooperation for Ionosphere Data Collection and Analysis Campaign in the Asia Pacific Region to Implement GNSS Applications for Aviation Safety Operations	Japan
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IP/8/10	Expansion of the Fellowship Training Programme of the of the Republic of Korea	Republic of Korea
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AGENDA ITEM 9: OTHER BUSINESS		
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a) THEME TOPIC FOR THE 48th CONFERENCE OF DGCA^s		
DP/9a/1	Possible Theme Topic for the 48 th Conference of Directors General of Civil Aviation, Asia and Pacific Regions	ICAO
DP/9a/2	Proposal on the Theme Topic for 48 th Conference of Directors General of Civil Aviation Asia and Pacific Regions	France

REF.	TITLE	PRESENTED BY
b) ENDORSEMENT OF ACTION ITEMS ARISING FROM THE PRESENT CONFERENCE		
DP/9b/1	List of Action Items Arising from the 47 th Conference <i>(To be develop during the Conference)</i>	ICAO
c) ANY OTHER MATTERS		
DP/9c/1	Schedule of Meetings/Seminars/Workshops to be Convened in 2011 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	Scheduling of DGCA Conferences Being Held in the Same Years as ICAO Assemblies	Australia

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

ATTACHMENTS

Macao, China : 25 - 29 October 2010

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

ATTACHMENT 1

OPENING REMARKS
BY
HONOURABLE SECRETARY FOR
TRANSPORT AND PUBLIC WORKS
OF MACAO SAR

Macao, China : 25 - 29 October 2010

47TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS

OPENING CEREMONY
25 OCTOBER 2010

WELCOME ADDRESS BY
HONOURABLE SECRETARY FOR TRANSPORT AND PUBLIC WORKS
OF MACAO SAR

His Excellency the Chief Executive of Macao Special Administrative Region, Mr. Chui Sai On,

Honorable President of the Council, International Civil Aviation Organization, Mr. Roberto Kobeh González,

Honorable Deputy Director of the Liaison Office of the Central People's Government in Macau Special Administrative Region, Ms. Gao Yan,

Honorable Commissioner of the Office of the Ministry of Foreign Affairs of the People's Republic of China in Macau Special Administrative Region, Mr. Lu ShuMin,

Honorable Regional Director of Asia and Pacific Office, International Civil Aviation Organization,
Mr. Mokhtar Awan,

Distinguished guests,

Dear delegates and friends from the media,

Ladies and Gentlemen,

Good morning. It is indeed an honour to be present in this regional Conference that gathers more than 250 experts from about 40 states, administrations or organizations in this highly professional specialty. On behalf of the Government of Macao Special Administrative Region, let me extend a warm welcome to all of you for coming to Macao. As a native of this lovely city, I never cease to admire its virtues. I hope you partake of its many benefits and delights and enjoy yourself in the time that you are with us.

You come to a place of about 30 square kilometers and 540,000 residents. Macao, over the past years, has undergone a phase of tremendous and dramatic development. Since its return to Chinese sovereignty and with the liberalization of the gaming industry in 2002, Macao has undergone a fundamental transformation and has now become a dynamic tourism and MICE center that attracts both leisure and business travelers from everywhere.

The Macao economy is enjoying its best conditions after the handover. In the gaming industry, we have an enviable growth rate for 40.2% for January to June 2010. The Closer Economic Partnership Agreement between Macao and mainland China that came into effect in 2004 has offered Macao-made products tariff-free access into the Mainland, therefore giving our local companies more business opportunities in the immense Chinese market. The implementation of the individual travel scheme of the mainland Chinese in Macao since 2003, the inscription of the Historic Centre of Macao on the World Heritage List in 2005, to name a few, have boosted our tourism. Total visitor arrivals reached over 12 million in the first six months of this year, up by 18% year-on-year.

In recent years, the provinces and their cities in the Pan Pearl River Delta Region have been making best endeavours to enhance regional integration. To achieve this aim, one of the basic and crucial elements is to construct convenient access between the cities. It is therefore timely to build a regional integrated transportation system. With the determination and the collaborative efforts among the governments in the Pearl River Delta Region, consensus has already been reached on the future development plan of cross border infrastructure facilities. We will be fully participating in these city planning mega-projects and ensure that Macao's future development will be in line with its positioning as a world tourism and leisure centre, in accordance with the Pearl River Delta Reformation Planning devised by the Chinese Central Government.

According to the latest financial forecast of the International Air Transport Association, the air transport markets have experienced a strong half year growth, reflecting the post recession rebound. The rebound has been strong for Asia-Pacific airlines in cargo markets and revenues. Although air travel growth rate will slow down during the rest of the year, the Asia-Pacific airlines are still expected to report a year-round growth of 6.3% in 2010 and generate the highest profits than airlines in other regions of the world. As a counterpart in the Asia Pacific Region, we wish to see Macao benefit from the economy upturn.

Aviation in Macao is relatively new compared to the development of the industry in other countries. Dating back to the 80s, as the territory progressed into a rapidly developing region in Pearl River Delta, we saw the need to open ourselves to modernity and integrate with the globalization process. And so we have had our airport and our airlines!

Since our industry has been built up, we have been adopting open skies policies that keep our air transport up to date in a constantly developing market. I am proud to mention that Macao adopts the most liberal criterion listed by International Civil Aviation Organization. With the continuous support from the Chinese Central Government on the air transport policies between Macao and the mainland, our trade and commerce has been growing remarkably well.

We understand the importance of stable markets. We understand the importance of a reliable economic framework. But while we facilitate the healthy development of the industry, we never give in to enforce our regulations in a less stringent manner. The results of Macao's participation in the Universal Safety Oversight Audit Programme and the Universal Security Audit Programme respectively in 2009 and 2010 proved that Macao's safety oversight work is in compliance with the Standards and Recommended practices of International Civil Aviation Organization. I wish to say that although Macao was not a member state and was actually not required to take part in the audits, we still initiated our wish to the Organization to participate in the programmes. And through concerted efforts between our Civil Aviation Authority, other government entities and the local industry operators, our lack of effective implementation was far below the global average. We promise that the government and the industry will continue to work closely with each other to follow up on the implementation of corrective action plan. Our ultimate wish is to carry out regulatory responsibilities effectively while working with the operators to develop the industry in a healthy, regulated, professional and sustainable direction.

We have also been reaching out to boost regional cooperation by taking part in Cooperative Development of Operational Safety and Continuing Airworthiness Programme – South East Asia, Cooperative Arrangement for Preventing the Spread of Communicable Diseases Through Air Travel and Cooperative Aviation Security Programme, Asia-Pacific. We have signed mutual acceptance arrangements with Mainland China and Hong Kong SAR for Approval of Aircraft Maintenance Organizations and Airworthiness Certification. We have also achieved protocols respectively with mainland China and France on investigation of aircraft accident and incident. All these cooperative programmes have allowed us to share resources and experiences

with other states or administrations and further enhance our capacity to carry out oversight work.

Dear delegates, you will be discussing agenda items ranging from air navigation planning and implementation, aviation safety, aviation security, air transport, environment to regional cooperation at a critical moment when the world is transiting from economic slowdown to recovery. We should all work hand in hand to promote sustained growth for our civil aviation systems.

So in welcoming all of you to Macao, I hope you find it rewarding travelling here and you go from our place with fond memories, not only of the city itself but also of the friendliness and the welcome of the Macao people.

Before I conclude, I wish to express my gratitude to the International Civil Aviation Organization for their efforts in achieving safety in the global aviation market.

Let me also take this opportunity to thank the supporting entities of this Conference and the people working behind the scene to make this event possible and smooth.

I wish the 47th DGCA every success. Good luck and good health to all of you.

Thank you!

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

ATTACHMENT 2

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

Macao, China : 25 - 29 October 2010

**ADDRESS BY THE PRESIDENT OF THE COUNCIL OF THE
INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO),
MR. ROBERTO KOBEH GONZÁLEZ,
TO THE 47TH CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION,
ASIA AND PACIFIC REGIONS**

*“Through the Turbulence, Working Together for
the Recovery and Enhanced Development of Aviation”*

(Macao Special Administrative Region, China – 25 October 2010)

It is truly a privilege for me to join you today for the 47th Conference of Directors General of Civil Aviation of the Asia and Pacific Regions.

On behalf of ICAO, I would like to thank the Government of the Macao Special Administrative Region for hosting the Conference, which brings together influential aviation stakeholders from the Asia and Pacific Regions.

We meet at a time when the global airline industry is showing positive signs after going through the worst 18 months in its history. The latest ICAO forecast is for world traffic to grow at 6.4 per cent this year, 4.7 per cent in 2011 and 4.9 per cent in 2012. Traffic for Asia/Pacific airlines should grow considerably faster than the global average with rates of 10.8, 7.5 and 7.5 per cent for the same period.

So recovery is under way and the theme of your Conference – *“Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation,”* definitely points the way of maintain the momentum.

Safety

One of the challenges you face is to further improve aviation safety.

In your deliberations on this subject, you may wish to take into account the outcome of the 37th Session of the ICAO Assembly, including the adoption of a comprehensive safety strategy based on transparency and the greater sharing of safety information.

It contains five major elements which can be summarized as follows:

1. Total commitment to the continuous monitoring approach regarding safety oversight;
2. Creation and implementation of a truly international safety information sharing mechanism;
3. Reaffirmation of the extremely productive role which regional safety oversight organizations can play in improving safety;
4. Agreement on the development of a global organizational framework to protect the providers of sensitive safety data used; and
5. Creation of a new annex dedicated to safety.

Adapting this approach would also enhance harmonization with the global ICAO safety strategy.

Security

Security is another pillar of a sound air transport system and here again the recent Assembly made significant progress when it adopted a Declaration on Aviation Security. It reaffirms the international commitment to enhance aviation security collaboratively and proactively through a number of ways, including screening technologies to detect prohibited articles, strengthening international standards, improving security information-sharing and providing capacity-building assistance to States in need.

The Assembly also fully supported a new ICAO aviation security strategy, which highlights key priorities, such as identifying and preventing new forms of attack before they occur, streamlining security checks so that they remain effective but are not duplicated unnecessarily, and improving the capabilities of States to oversee aviation security.

Environment

The third major topic addressed at the ICAO Assembly was the environment and, more specifically, climate change. I was very happy when the Assembly adopted a historic resolution making ICAO the first United Nations agency to lead a sector in the establishment of a globally harmonized agreement for addressing its CO₂ emissions.

The resolution builds on achievements since the last ICAO Assembly in 2007. It includes such new initiatives as the development of a framework for market-based measures and a medium term global aspirational goal of keeping the global net carbon emissions from international aviation from 2020 at the same level.

The results of the Assembly will form the basis for ICAO's presentation at the 16th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) meeting scheduled for December in Mexico.

Issues/Challenges in the Region

The topics I have covered so far are global in nature. I would also like to address a few issues of particular interest to your region.

Seamless Sky ATM

At the 46th DGCA Conference last year, I made the following comment: *“There is no doubt that a seamless sky is fundamental to the safe and orderly growth of air transport in the Asia and Pacific Regions, as it is in all other regions.”*

I am happy to observe that as a result of an Action Item arising from last year's Conference, the Region has been actively pursuing the objective of a seamless sky in air traffic management and that a workshop on that subject is planned for early next year.

I am most interested in the outcomes from the workshop and I assure this Conference that ICAO will be always prepared to provide any guidance that may be sought in order to turn the vision of a global seamless system into reality.

Performance Based Navigation

Another issue is Performance Based Navigation. Following the establishment of the Flight Procedure Programme Office in Beijing, it was encouraging to learn that nine States declared their intent to join the Programme as Participating States, while another seven indicated their intent to join as User States. The benefits that States can accrue from this Programme are significant and I would encourage the remaining States to take full advantage of this facility within the Region.

Regional Aviation Safety Groups (RASGs)

An initiative that can speed progress is the introduction of regional aviation safety groups.

The ICAO Council approved the establishment of these groups in May 2009, with the aim of supporting a regional performance framework for the management of safety. The expectation was that this would create both the awareness of regional safety issues and a mechanism for addressing them, without fundamentally the efforts that are presently underway in several ICAO regions.

The ICAO Secretariat is presenting a paper at this Conference suggesting a way of integrating the management of the safety group's mechanism into the Asia and Pacific regional working system.

Liberalization

Before I conclude my remarks, I would like to briefly point to the Assembly's endorsement of ICAO's future work on liberalization. In a few words, the Assembly reaffirmed that the Organization should continue to exercise its leadership role in facilitating and assisting States in the liberalization of international air transport.

A number of forward-looking initiatives were introduced. For example, there was a request for the Council to explore the concept of a multilateral agreement on liberalizing airline ownership and control rules. It was also suggested that ICAO consider developing new measurement indicators for liberalization and that ICAO promote help improve transparency and consumer protection.

I was particularly pleased that the Assembly asked us to continue convening the very successful ICAO Air Services Negotiation Conference, or ICAN. India will be hosting the ICAN2011 next year in Mumbai and I invited all of you to attend this meeting.

Conclusion

Ladies and gentlemen, whether we are talking about aviation safety, seamless skies or any other aspect of international civil aviation, the key to success and progress is cooperation. Let this be the guiding principle on which this conference unfolds.

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47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

ATTACHMENT 3

ADDRESS BY REGIONAL DIRECTOR ICAO ASIA AND PACIFIC OFFICE

Macao, China : 25 - 29 October 2010

**OPENING REMARKS OF THE
REGIONAL DIRECTOR, ICAO ASIA AND PACIFIC OFFICE
AT THE 47TH DGCA CONFERENCE**

Excellency, Chief Executive of Macao SAR, Dr. Fernando Chui

President of the ICAO Council, Mr. Roberto Kobeh Gonzalez

Deputy Director of Liaison Office of the Central People's Government in Macao SAR,
Ms. Gao Yan

Commissioner of the Office of the Ministry of Foreign Affairs of the People's Republic of
China in Macao SAR, Mr. Lu ShuMin

Secretary for Transport and Public Works of Macao SAR, Mr. Lau Si Io

President of CAA of Macao SAR, Mr. Simon Chan Weng Hong

Directors General / Chief Executives Asia and the Pacific regions

Members of the Delegations

International Organizations and Industry Partners

Observers

Distinguished Guests

Ladies and Gentlemen,

Zao Shang Hao, Good morning

It is a matter of great honour for me to welcome you to the 47th DGCA Conference in Macao,
China and to represent the Secretary General of ICAO.

I would like to express my gratitude and commend this year's Conference host, the Civil
Aviation Authority of Macao, SAR, and the Government of Macao, SAR, for the excellent
hospitality and arrangements made to receive the delegates; and for the meticulous planning
and preparations for the 47th Conference.

I owe a special word of thanks to the honorable Chief Executive of Macao SAR, Dr. Fernando
Chui your Excellency for sparing time and making it convenient to be here this morning to
grace the occasion.

I am grateful to the President of the ICAO Council Mr. Roberto Kobeh Gonzales, who has
kindly joined us in this important regional Conference of the Directors General, especially in
view of the fact that he has recently been through an exhaustive two weeks of the ICAO
Assembly Sessions. His presence is indeed a source of great encouragement and has added
value to the significance of this high level gathering of civil aviation administrators. We look
forward to him sharing his views on the outcomes of the 37th Assembly Session.

I would also like to take this opportunity to extend a very warm welcome to the Directors General and Chief Executives of various Civil Aviation Administrations who are joining the Conference of the Directors General Asia and Pacific Regions for the first time – these include:

Air Commodore Mahmud Hussain, Chairman CAA Bangladesh;

Mr. Batmunkh, Director General, CAA Mongolia,

Mr. Ram Prasad Neupane, Director General, CAA Nepal;

Mr. Alfonso G. Cusi, Director General, CAA Philippines; and

Mr. KIM Sookon, Director General for Aviation Safety Policy Bureau, Republic of Korea.

We look forward to your valuable contribution to the success of the Conference.

The DGCA Conference as you all know enjoys a remarkable history. The Conference has evolved as a significant regional forum for informal exchange of views among the Directors General/Chief Executives of Civil Aviation of the Asia and Pacific Regions.

Following in the footsteps of the recently concluded 37th Session of the ICAO Assembly, this 47th Conference of the Directors General, will I am certain, play a pivotal role in not only charting out a harmonized strategy at the regional (Asia/Pacific) level to ensure effective and timely implementation of the various Assembly Resolutions, but also give meaningful direction to address issues confronting our region, in particular during a difficult period in the history of aviation.

I feel the Theme topic selected for this Conference is indeed very timely and apt - “*Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation*”. With your collective wisdom and committed support, I am sure we will overcome all odds and challenges, and move into an era of a safer, securer and more efficient aviation system.

As you may recall, this year the Regional Office faced many challenges in the conduct of meetings in Bangkok between March and May. As a result, we were compelled to re-locate meetings outside of Thailand. I must express my gratitude to Indonesia, Malaysia, Singapore, and Sri Lanka for their timely offer to host the meetings, workshops and seminars. This certainly facilitated the APAC Office to maintain continuity in its work programme with little or no disruption.

Let me now move forward with first addressing the progress achieved on some of the salient issues since the last DGCA Conference. I am pleased to inform you that during your deliberations this week you will review some significant progress on the actions identified during the 46th DGCA Conference as well as developments since the last Conference.

In the field of ATM there is RVSM implementation, implementation of RNP routes and progress with Air Traffic Flow Management.

While the safety monitoring in APAC region is undertaken as a regional programme in accordance with Annex 11 (by FIVE APANPIRG approved RMAs) and the regional target level of safety (TLS) for RVSM operations is being widely satisfied across the APAC region; but these are not without their on-going problems like: persistent examples of RVSM non-approved flights “incorrectly” filing flight plans showing RVSM approval in Field 10; and Large Height Deviations (LHD). I would urge the Directors General to kindly take note and

institute measures to arrest the tendency of filing flight plans that do not go in accordance with RVSM approval; and also maximize coordination amongst ATCs and air operators to minimize Large Height Deviations.

To date, three Bay of Bengal Reduced Horizontal Separation Task Force meetings had been held, and significant cooperation and progress had been accomplished. The fourth meeting of the Task Force was just concluded last week (18-22 October) and the Report will be placed on the website soon.

You may wish to recall that last year the theme topic for the 46th DGCA Conference was: *Seamless Sky: Bringing Together the Asia/Pacific Regions*. As you all know, the benefits of seamless sky and the need to integrate the global air traffic management system were acclaimed and deliberated upon during the last Conference, resulting in the signing of the Kansai Statement.

The DGCA Conference noted that the ATM Operational Concept and the Global Air Navigation Plan provided the global framework, but at the same time, felt that NextGen and SESAR type planning could be useful to the region. The Conference requested ICAO Regional Office to take a leadership role and arrange for further discussion on this issue. The matter was accordingly presented and discussed at the APANPIRG/21 meeting in September this year.

As a first step toward establishing Seamless Sky, it is considered important to extend knowledge about ICAO Global ATM Operational Concept and the future ATM visions such as NextGen (United States), SESAR (Europe) and CARATS (Japan). To achieve this objective, the Federal Aviation Administration (FAA) and the Japan Civil Aviation Bureau (JCAB), with support from the ICAO Asia Pacific Office, will hold a two-day workshop in Tokyo in February 2011 on the future air traffic systems. The workshop will be followed by a one-day Ad-Working Group meeting to discuss the outcomes from the workshop and chart a clear vision for seamless sky in the APAC region.

I may add that there will be a few papers presented during this meeting, which will afford an added opportunity to contemplate further on the issue of seamless skies. It is expected that the workshop and other foras to be set up for this, would be able to clearly identify the mechanism to proceed with this issue while remaining within the framework of APANPIRG Regional programme, without creating duplication of effort.

The Directors General may be aware that the Asia/Pacific Performance Based Navigation Implementation Plan has been developed and was adopted by APANPIRG in September 2009. While Assembly Resolution calls for States/ Administration to submit their State Plans by December 2009, not all States have done so. The State Plans that were submitted to the ICAO APAC Office were reviewed by a team of experts representing four States and IATA. A report on the review has been/will be provided to the respective States.

Another area of concern for my Office is that only 28 of the 40 States in our region have nominated their PBN Focal Points. The recently concluded Seventh Meeting of the PBN Task Force and the APANPIRG/21 Meeting has also highlighted some significant areas of challenge like: safety assessment; assessment of PBN fleet readiness; and description of tangible benefits. I would urge the States / Administrations to carefully review and consider the basic guidance provided in the PBN Manual, the APAC Regional PBN Implementation Plan and the guidance provided through the PBN Task Force Meetings while preparing their respective State PBN Implementation Plans.

I would urge the personal intervention of the Directors General to develop greater awareness at the appropriate State level, so that we ensure compliance with the dates indicated in the APAC PBN plan and Assembly Resolution A37-11 which reiterates implementation by due dates.

I would also strongly urge the States that are yet to develop their PBN plans to do so at the earliest.

Considerable work has been done in the implementation of new ADS-B surveillance technology. APAC States have been cooperating on related data sharing and the updating of trunk circuits for applicable ground-to-ground networks to ensure effective information flows between States and neighboring Regions. In the last few years, more than twenty seminars have been conducted to facilitate planning and implementation of ATN, ADS-B and PBN infrastructure and procedures. These initiatives and activities demonstrate the spirit of cooperation and coordination between APAC's States and establishes a foundation for a seamless ATM system in the APAC Region.

In order to ensure a harmonized implementation of the provisions contained in Amendment 1 to the 15th Edition of PANS-ATM relating to comprehensive changes to the ICAO Flight Plan and associated ATS Messages formats, the Regional Guidance material has been developed by APANPIRG's Asia/Pacific ICAO Flight Plan and ATS Messages Task Force. While the Asia Pacific States are encouraged to use the material as general implementation guidance for the new flight plan and ATS messages format, I would look forward to the States, to institute adequate measures to ensure compliance by the due date in 15 November 2012. The APANPIRG/21 also adopted five Conclusions to that effect (Conclusion 21/4; 21/5; 21/6; 21/13; and 21/14. These emphasize the need for:

- A clear understanding of what is intended in Amendment 1;
- States and users to continue implementation based on the "Strategy for the Implementation of new ICAO Flight Plan and Supporting ATS messages";
- Keep the ICAO Flight Plan Implementation Tracking System (FITS) website updated; and
- Ensure Global and regional harmonization, as it is crucial in implementing the new flight plan by the due date.

The next meeting of the FPL&AM/TF/4 is scheduled for March 2011. I would strongly urge all States to join the meeting.

You will be pleased to note that much improvement in the provision of meteorology for international aviation in the ASIA/PAC Region was effected during the past year. For instance, OPMET availability has improved by 25% with regards to reception of METAR at SADIS; SIGMET test participants has increased by 30% (8 States participating for the first time); and regional implementation of 30-hour TAF for ultra-long haul flight planning has more than doubled to 75%. These accomplishments once again bear testimony to States' commitment to meeting international standards in providing MET services to airlines and operators.

I am sure you will all agree that ultimately the successful implementation of a global air navigation system depends on cooperation among all members of the civil aviation community. The Regional Office is committed to meeting the operational expectations of all stakeholders and continued contribution to global economic development in a safe, secure, environment friendly and efficient manner. Likewise, the Regional Office looks forward to the continued support of the member States and industry partners.

In the coming cycle or next three years the Organization is poised towards providing a sharper focus on three strategic areas, namely: safety; security; and environmental protection and sustainable development of international civil aviation. These will provide the over-arching framework for the definition of programmes and projects in order to ensure that the work of the Organization remains focused and relevant to the existing and emerging needs of the air transport industry so that its member States could implement the ICAO provisions to meet the aspirations and expectations of the traveling public.

The 37th Assembly Resolutions amply demonstrates the intent and we look forward to the continued cooperation and support of the member States/Administrations for effective implementation of the same.

Let me also inform the Conference that ICAO has identified programmes for implementation in the next triennium and prioritized the projects under these programmes, which fall within the zero nominal growth budget. The Regional Office has aligned its work programme to the three core objectives mentioned earlier and has developed its programmes /projects accordingly. The major activities include:

- Optimized ATS Route structure;
- Improved surveillance using ADS-B;
- Regional Monitoring Agency;
- Civil/military coordination and cooperation;
- Implementation of RVSM, PBN, and Safety Management;
- Aerodrome safety;
- MET activities on Volcano watch, tropical cyclone watch, SIGMET and OPMET;
- Safety audits; and
- Security

Another core issue which is very relevant today and merits mention is Training. It goes without saying that ICAO has an important role to play in ensuring that the civil aviation community has access to a pool of qualified professionals it needs to support safe, secure and efficient development of aviation. In this regard, as you may be aware, ICAO has initiated work to develop policies to ensure that enough competent personnel are available to manage, operate and maintain the global air transportation system of the future. The next generation of aviation professional initiatives was launched, and in May 2009 a NGAP task force was created.

I am pleased to inform you that as a result of an Action Item 45/9 from the 45th DGCA Conference, the Asia Pacific Office, in cooperation with Singapore, conducted a Seminar to address/discuss priorities in human resource development and training needs in the region. A paper to this effect will be presented for discussion during the Conference.

I would like to commend all States/Administrations in the Asia Pacific region that in keeping with Safety Target Levels as stipulated in the Global Aviation safety Plan (GASP) we have successfully kept the accident rate below the global average.

I would however like to put in a word of caution that while the Asia Pacific Accident Rate is below/near the global average, but there is a visible upward trend. Concerted efforts will need to be instituted to arrest the upward trend and ensure that the APAC region achieves significant reduction in the accident rate. In addition, the number of fatal accidents and related fatalities will have to be brought down in keeping with the public perception of aviation being the safest mode of transportation. I will be presenting a Safety Briefing and a Working Paper later during the meeting.

Some other significant developments include the decision of the Council to move ahead with the Continuous Monitoring Approach (CMA) and the Regional Aviation Safety Groups (RASG). These have also been duly endorsed by the 37th Assembly.

As you well know the present cycle of audits under the Comprehensive System Approach (CSA) will end this year. A detailed transition plan, including the timelines for the implementation of all the major components of CMA, has been prepared for the two year period from 2011 to 2012. Implementation of the CMA will begin gradually in January 2013. The transition period will also be used to conduct workshops on the CMA transition plan and reporting tools in each ICAO region. States/Administrations are urged to prepare themselves in accordance with the Transition Plan so that we embark into the new phase (CMA) in a systematic and efficient manner.

The Regional Aviation Safety Group-APAC (RASG-APAC) aims at supporting a regional performance framework for the management of safety. The establishment of RASG will create both the awareness of regional safety issues and a mechanism for addressing them. The ICAO Secretariat will be presenting a paper to the Conference describing the mechanism/ modalities that could be instituted for the establishment of RASG. The paper would also seek the views of the Directors General Civil Aviation on how best to make the RASG-APAC into an effective and efficient mechanism I am sure the paper would generate focused deliberations as it calls, on a continuous basis, to ensure that all safety issues are addressed in a cohesive manner.

Like other ICAO regions, the APAC region also needs some form of a safety oversight mechanism like the Regional Safety Oversight Organization (RSOO) The merits of an RSOO need no elaboration. The establishment of an RSOO has been the crying need of some States that for various reasons are unable to have in place an adequate safety oversight organization to address the State Obligations to the Convention and its Annexes.

The burning question continues to remain:

How to support/ensure the establishment of an effective and sustainable safety oversight system from a global as well as regional perspective.

Developing viable funding mechanisms, business models and cost structures are some major concerns that will invariably need to be addressed and understood.

A few words on Security –

You may kindly recall that at the 33rd ICAO Assembly (2001), need for a regional aviation security programme, on similar lines as the safety and airworthiness programmes was felt. Subsequently, at the regional level, CASP-AP, which is a regional cooperative AVSEC Programme was established in 2005 and was open to all Asia Pacific States. The primary objective of this programme was to assist member States to comply with the SARPs and enhance security capabilities. This was to be achieved through harmonization of legislative and regulatory frameworks; improved implementation and enforcement; improved oversight; and personnel training.

I am pleased to inform you that 25 member States have joined the CASP-AP and have accrued significant benefits in terms of personnel training; evaluation of National Civil Aviation Security Programme, evaluation of airport security programme; and evaluation of member States aviation security legislation etc.,

I am pleased to inform you that the Programme is working closely with ICAO Offices and programmes; it coordinates its activities with MID East Office and is collaborating with PASO for joint security efforts.

Before I conclude, I would like to once again thank the Government of Macao SAR and the Civil Aviation Authority, Macao China for their excellent efforts and efficient management of the Conference. The warm hospitality has made us feel at home and we look forward to a very productive week of strenuous work in a very conducive environment.

The work programme this week is extensive and wide ranging - all of which serve to address the regional requirements for enhancement of aviation safety. In all, we have 62 Discussion Papers and 52 Information Papers being presented. I am confident that these will generate extensive and focused deliberations.

I wish the delegates the very best and look forward to their contribution to the success of the Conference.

Thank you!

47th Conference of Directors General of Civil Aviation
Asia and Pacific Regions

ATTACHMENT 4

MACAO STATEMENT

Macao, China : 25 - 29 October 2010

**47th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION,
ASIA AND PACIFIC REGIONS
MACAO, CHINA, 25-29 OCTOBER, 2010**

The Directors General of Civil Aviation (DGCA) of the Asia Pacific Regions met for the 47th DGCA Conference in the Macao Special Administrative Region of the People's Republic of China on 25 to 29 October 2010. Recalling that the 46th Conference had endorsed the Theme Topic for the 47th DGCA Conference as "Through the Turbulence, Working Together for the Recovery and Enhanced Development of Aviation", Directors General of the Regions held a productive discussion in face of the expected unprecedented growth of air transportation in the Asia Pacific Regions and the associated civil aviation safety and sustainability issues to which it will undoubtedly give rise and agree to issue this Macao Statement.

MACAO STATEMENT

1. With the recovery of the world economy and the Asia Pacific Regions expected to grow at an average above the rest of the world we can expect a period of unprecedented growth of the aviation industry in the Regions. In face of the increasing aviation activity in the Asia Pacific Regions we reaffirm that safety and security must remain the highest priorities of the aviation industry, while efficiency and sustainability will be essential elements of the new era of development of air transportation.
2. Regarding aviation safety, we recognize the need to manage safety in a more cooperative and proactive manner. We underline our commitment to work collaboratively to facilitate collection, analysis and exchange of aviation safety information among member States/Administrations, international organizations and the industry. We recognize the importance of establishing a coordination mechanism to review safety concerns, adopt best practices and apply safety interventions uniformly in order to enhance the regional safety performance based on the Global Aviation Safety Plan (GASP) of the International Civil Aviation Organization (ICAO). In order to achieve this desired outcome effectively, member States/Administrations are encouraged to foster the implementation of Safety Management Systems and State Safety Programs.
3. Regarding aviation security, in order to counter threats against civil aviation, member States/Administrations are encouraged to cooperate with one another and work closely with the aviation industry, ICAO and other involved parties to enhance aviation security in the Asia Pacific Region. As we recognize the importance of sharing expertise, best practices and information, member States/Administrations are highly encouraged to participate in the ICAO Aviation Security Point of Contact (PoC) network. We recognize the importance of supporting capacity-building activities as well as continuously supporting the development of modern screening technologies to detect prohibited materials, and security measures that are mutually acceptable to member States/Administrations. In addition, we are committed to continue to exercise oversight of the implementation of aviation security to ensure compliance with ICAO Standards and Recommended Practices (SARPs).
4. Regarding aviation efficiency, we recognize that with the development of modern technologies and through the modernization of Air Traffic Management (ATM) systems and the optimization of air traffic route structures, more efficient and safer operations can be achieved. We also recognize that such developments result in saving flight time and fuel and thus contribute to the global environmental protection by reducing greenhouse gas (GHG) emissions. In addition, we recognize that the Communication, Navigation and Surveillance/Air

