

43<sup>rd</sup> Conference of Directors General of Civil Aviation  
Asia and Pacific Regions

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Bali, Indonesia: 4 to 8 December 2006

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# **PROGRAMME**

Bali, Indonesia: 4 to 8 December 2006

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**PROGRAMME**

**Sunday, 3 December 2006**

08:00 – 16:00 - Arrival of The 43<sup>rd</sup> DGCA Aspac Conference Delegates  
- Early Registration  
Venue : Lobby of Westin Resort Nusa Dua, Bali

19:00 – 20:30 - Welcome Cocktail  
Venue : Kite Terrace, Westin Hotel  
Agenda : - speech by Organizing Committee  
- speech by Sponsor

**Monday, 4 December 2006**

08:00 – 09:00 - Registration of Delegates  
Venue : Bali International Convention Center, Westin Hotel

09:00 – 17:30 - Secretariat desk open to accommodate late registration

09:00 – 09:45 - OPENING CEREMONY

- Welcome dance
- Welcoming Remarks by Governor of Bali Province
- Welcoming Remarks by Mr. LALIT B. SHAH, ICAO Regional Director, Asia Pacific Office
- Welcoming Remarks by Mr. HATTA RAJASA, Minister of Transportation of the Republic of Indonesia

Venue : Nusantara room, Bali International Convention Center

09:45 – 10:00 - PRESS CONFERENCE  
Venue : Surabaya room  
- Minister of Transportation accompanied by Director General of Civil Aviation of the Republic of Indonesia and ICAO Regional Director

10:00 - 10:15 - GROUP PHOTO

10:15 – 10:45 - Coffee/tea break

10:45 – 12:00 - Conference Session  
Venue : Jakarta room

12:00 – 13:15 - Lunch

13:15 – 15:00 - Conference Session  
Venue : Jakarta room

15:00 – 15:30 - Coffee/tea break

15:30 – 17:15 - Conference Session  
Venue : Jakarta room

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- 19:00 – 21:30 - Welcome dinner, hosted by Director General of Civil Aviation of Indonesia  
Venue : Nusa Indah room  
Agenda : - Welcome speech by Director General of Civil Aviation of Indonesia  
Speech by sponsor

**Tuesday, 5 December 2006**

- 08:30 – 10:00 - Conference Session  
Venue : Jakarta room
- 10:00 – 10:30 - Coffee/tea break
- 10:30 – 12:00 - Conference Session  
Venue : Jakarta room
- 12:00 – 13:15 - Lunch
- 13:15 – 15:00 - Conference Session  
Venue : Jakarta room
- 15:00 – 15:30 - Coffee/tea break
- 15:30 – 17:15 - Conference Session  
Venue : Jakarta room

**Wednesday, 6 December 2006**

- 08:30 – 10:00 - Conference Session  
Venue : Jakarta room
- 10:00 – 10:30 - Coffee/tea break
- 10:30 – 12:00 - Conference Session  
Venue : Jakarta room
- 12:00 – 13:15 - Lunch
- 13:15 – 15:00 - Conference Session  
Venue : Jakarta room
- 15:00 – 15:30 - Coffee/tea break
- 15:30 – 17:15 - Presentation by GMF Aero Asia; PTDI; NTP



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# **AGENDA**

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEMS**

- Agenda Item 1:           THEME TOPIC:  
  
*'Sustainable Practices for Enhanced Safety Oversight  
and Security'*
- Agenda Item 2:           REVIEW OF ACTION ITEMS ARISING  
FROM THE 42<sup>ND</sup> CONFERENCE
- Agenda Item 3:           AIR NAVIGATION PLANNING AND  
IMPLEMENTATION
- Agenda Item 4:           CNS/ATM IMPLEMENTATION ACTIVITIES
- Agenda Item 5:           AVIATION SAFETY
- Agenda Item 6:           AVIATION SECURITY
- Agenda Item 7:           AIR TRANSPORT
- Agenda Item 8:           TECHNICAL COOPERATION
- Agenda Item 9:           OTHER BUSINESS
- A) Theme Topic for the 44<sup>th</sup> 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**

Bali, Indonesia: 4 to 8 December 2006

**I. OPENING OF THE CONFERENCE**

I.1 The 43<sup>rd</sup> Conference of Directors General of Civil Aviation (DGCAs), Asia and Pacific Regions was hosted by the Directorate General of Civil Aviation, Ministry of Transportation of Republic of Indonesia and was held at the Bali International Convention Centre, Westin Resort Nusa Dua Bali, Bali, Indonesia.

I.2 The Conference commenced with the official opening ceremony at 09:00 hours on Monday, 4 December 2006. It was attended by 197 delegates from 33 States/Administrations and 5 International Organizations.

I.3 The Vice-Governor of Bali Province, H. E. IGN Alit Kalakan, extended a warm welcome to all the delegates of the 43<sup>rd</sup> Conference of Directors General of Civil Aviation of the Asia and Pacific Regions to Bali, Indonesia. On behalf of the Governor of the Bali Province, H.E. Dewa Beratha, he expressed sincere thanks to the International Civil Aviation Organization (ICAO) for the valuable support and assistance in hosting the event for the fourth time in Indonesia. He also thanked the Directors General of Civil Aviation of the Asia Pacific States for their participation in this important Conference.

I.4 The full text of the welcoming remarks of the Governor of Bali Province is included as Attachment 1 to this report.

I.5 Mr. Lalit B. Shah, the ICAO Regional Director expressed sincere thanks to the Government of the Republic of Indonesia for accepting to host the Conference on a short notice and congratulated the hosts for a very successful and efficient organization. Mr. Shah conveyed the greetings of the President of Council of ICAO, Mr. Roberto Kobeh González and the Secretary General, Dr. Taïeb Chérif, to the Minister of Transportation, H.E. Hatta Rajasa, the Vice-Governor of Bali, H.E. IGN Alit Kalakan, Beratha, the Director General of Civil Aviation, Mr. Moh Iksan Tatang, and to all distinguished delegates gathered in Bali, Indonesia. Mr. Shah then delivered a joint address to the Conference by the President of the Council of ICAO and the ICAO Secretary General.

I.6 In the joint address, the President of the Council of ICAO and the ICAO Secretary General thanked the Governor of Bali and the Minister of Transportation of the Republic of Indonesia for hosting the Conference and expressed their regrets for not being able to personally attend this important annual event due to commitments with the ongoing Council session. In noting the theme chosen for the 43<sup>rd</sup> Conference: “Sustainable Practices for enhanced safety oversight and security”, the President and the Secretary General expected the Conference will focus on the various sub-regional mechanisms which have been put in place for enhancing safety and security on a cooperative basis.

I.7 The full text of the joint message by the President of the Council of ICAO and the Secretary General of ICAO is included within the text of welcoming remarks by the Regional Director, ICAO Asia and Pacific Office, as Attachment 2 to this report.

I.8 H.E. Hatta Rajasa, Minister of Transportation of the Republic of Indonesia welcomed the distinguished delegates to Bali, Indonesia. He reminded the delegates that at the last DGCA Conference in Gold Coast, Australia, there was extensive deliberation on the theme topic for this year’s Conference and that it was decided to address the theme “Sustainable Practices for Enhanced Safety Oversight and Security”. He emphasized that every stakeholder in the civil aviation community has an individual role to play in contributing to the safe, secure and efficient air transport system. He added that it is through effective partnership that we are able to strengthen our capability in enhancing our air transport system through integrating the best people,

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equipment, knowledge and expertise available around us. At the conclusion of his address the Minister declared the Conference officially open.

I.9               The full text of Mr. Hatta Rajasa's speech is included as Attachment 3 to this report.

**II.               COMMENCEMENT OF CONFERENCE SESSIONS**

II.1              The first working session of the Conference commenced at 1045 hours on Monday, 4 December 2006. The ICAO Regional Director, Mr. Lalit B. Shah, as Secretary of the Conference, welcomed all participants to the 43<sup>rd</sup> Conference of Directors General of Civil Aviation, Asia and Pacific Regions. He drew attention to the salient features of the Conference and highlighted the important issues before it.

**III.             ELECTION OF CHAIRMAN**

III.1             The ICAO Regional Director called for nominations for a chairperson of the Conference. The leader of the delegation from the United States of America, Mr. Robert Sturgell, Deputy Administrator, Federal Aviation Administration, proposed the name of Mr. Moh Iksan Tatang, Director General of Civil Aviation, Ministry of Transportation of the Republic of Indonesia, to be the Chairman of the 43<sup>rd</sup> Conference of DGCA's. He provided a brief overview about Mr. Tatang's illustrious career achievements and wide management experience and expressed his confidence that Mr. Tatang would provide able stewardship to the Conference.

III.2             The delegate from the People's Republic of China, Mr. Guoqing Yang, Vice Minister, General Administration of Civil Aviation of China, supported the above proposal and Mr. Moh Iksan Tatang was unanimously elected as Chairman of the Conference.

III.3             Mr. Tatang 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 discussions at the Conference.

**IV.             ELECTION OF VICE CHAIRMAN**

IV.1             The Chairman then called for nominations for the Vice-Chairman and the chief delegate from Malaysia, Dato' Ir. Kok Soo Soon, Director General of Civil Aviation proposed the name of Mr. Guoqing Yang, Vice Minister, General Administration of Civil Aviation of China, for the position. This was supported by Mr. Yasuhisa Tani, Director General, Engineering Department of Japan Civil Aviation Bureau. Mr. Guoqing Yang was unanimously elected as Vice-Chairman of the Conference.

**V.              ADOPTION OF THE AGENDA**

V.1              The Provisional Agenda for the Conference and the programme for the duration of the Conference were adopted unanimously.

**VI. APPOINTMENT OF MODERATORS**

VI.1 The Chairman advised the Conference that the following delegates had kindly agreed to moderate the respective Agenda Items:

<b>SUBJECT</b>	<b>AGENDA ITEM</b>	<b>MODERATOR</b>
Theme Topic	1	Mr. H.M.C. Nimalsiri
Review of Action Items arising from the 42 <sup>nd</sup> Conference	2	Mr. H.M.C. Nimalsiri
Air Navigation Planning and Implementation	3	Mr. Wong Woon Liong
CNS/ATM Implementation Activities	4	Ms. Nancy Graham
Aviation Safety	5	Mr. Norman Lo
Aviation Security	6	M/Gen. Nilo C. Jatico
Air Transport	7	Mr. Shane Carmody
Technical Cooperation	8	Mr. Phala Dorji
Other Business	9	
a) Theme Topic for the 44 <sup>th</sup> Conference of DGCA's	9A	Capt. John Jones
b) Endorsement of Action Items Arising from the Present Conference	9B	Capt. John Jones
c) Any Other Matters	9C	Mr. Joseph Kasten

**VII. EXPLANATION OF THE WORK PROGRAMME**

VII.1 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 has been distributed.

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## **AGENDA ITEM 1**

### **THEME TOPIC:**

***“Sustainable Practices for  
Enhanced Safety Oversight  
and Security”***

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEM 1: THEME TOPIC:**

*‘Sustainable Practices for Enhanced Safety Oversight and Security’*

**Moderator: Mr. H.M.C. Nimalsiri**  
**Director General of Civil Aviation & Chief Executive Officer**  
**Civil Aviation Authority of Sri Lanka**

**1.1** Ten (10) Discussion Papers and no (0) Information Papers were received under this agenda item. The ten (10) Discussion Papers were presented:

REF.	TITLE	PRESENTED BY
<b>AGENDA ITEM 1</b>	<b>THEME TOPIC:</b> <i>Sustainable Practices for Enhanced Safety Oversight and Security</i>	
DP/1/1	Sustainable Practices for Enhanced Safety Oversight	ICAO
DP/1/2	IOSA - The IATA Operational Safety Audit Programme - Opportunities for Regulatory Authorities	IATA
DP/1/3	Application of Industry Safety and Security Codes of Practices for Business Aviation Operations	IBAC
DP/1/4	Modernizing Annex 6 Part II – Standards and Recommended Practices for International General Aviation – Aeroplanes	IBAC
DP/1/5	U.S. Approach to Safety Management System (SMS) Implementation: Commercial Air Operators and Approved Maintenance Organizations	United States of America
DP/1/6	Safety Enhancement Efforts and Challenges of Sustainable Practices in Nepal	Nepal
DP/1/7	ICAO Universal Safety Oversight Audit Program (USOAP) Vision for the Future Following Completion of Current Audit Cycle (2005-2010)	United States of America
DP/1/8	ICAO Provision of Direct Assistance to Air Operators - ICAO Safety Audits of International Airlines	United States of America
DP/1/9	Differences to ICAO SARPs	United Kingdom
DP/1/10	Managing Compliance with ICAO SARPs and ICAO State Letters	Republic of Korea

**1.2 DP/1/1 Sustainable Practices for Enhanced Safety Oversight**

1.2.1 In this paper, the ICAO Secretariat drew attention to the Conclusion on Safety Oversight agreed at the Directors General of Civil Aviation Conference on a Global Strategy for Aviation Safety held in Montréal, 20 to 22 March 2006. This Conclusion addressed the challenges of establishing sustainable safety oversight solutions in situations where resources are limited. The Conference was reminded that Assembly Resolution A35-7 encouraged Contracting States of ICAO to participate in or provide support to Regional or Sub-regional Safety Oversight Organizations (RSOO's) in order to assist States in complying with their obligations under the Chicago Convention. The Conference's attention was drawn to the fact that some States have not provided ICAO with their action plans or information on the implementation of their Action Plans arising from the first cycle of the ICAO Universal Safety Oversight Audit Programme (USOAP).

1.2.2 ICAO described the mandate, object and purpose of an RSOO and pointed out that the drafters of A35-7 and of the Safety Oversight Manual had all three of these activities in mind, but particularly the execution of safety oversight functions on behalf of member States by the RSOO. It was explained that this activity provides the best dividend in terms of efficiency and saving of resources for States where human and financial resources are insufficient to perform efficient safety oversight. The Conference was invited to endorse the Conclusion and related Decision arising from the Global DGCA Conference and to decide whether sharing resources necessary for the discharge of safety oversight is an appropriate mechanism for addressing the problems that some States in the Region face in discharging their responsibilities under the Chicago Convention and, if so, whether the COSCAPs represent the most suitable vehicles for this.

**1.3 DP/1/2 IOSA - The IATA Operational Safety Audit Programme - Opportunities for Regulatory Authorities**

1.3.1 The paper was presented by IATA. The IATA Operational Safety Audit (IOSA) programme of airlines is a key element of the IATA Six-point Safety Strategy, and has been implemented to achieve two fundamental aims – improving airline operational safety, and enhancing efficiency by eliminating redundant airline audits. Since programme launch in late 2003 over 220 airline audits have been completed as of November 2006. In that time, over 5000 audit findings have been identified and rectified. Following the IATA AGM in mid-2006, IOSA is now mandated for both existing Members, and any airline wanting to join IATA.

1.3.2 IOSA is based on the provisions of ICAO Annexes 1, 6 and 8, as well as relevant JAR/FAR provisions, and industry best practices. The IOSA Audit Report of an airline contains valuable information, not just for other airlines forming or continuing commercial arrangements, but also for States. At the 35<sup>th</sup> ICAO Assembly, and at the ICAO DGCAs Safety Conference in 2006, States were encouraged to make use of IOSA Audit results, to assist them in their Safety Oversight role. All States are encouraged to make use of IOSA audit data to enhance and complement their own Safety Oversight capabilities. Some States have already taken the step to mandate IOSA.

1.3.3 States, and Regional Safety Organisations, can gain a lot of benefit from IOSA in the implementation of their own oversight programmes. These comprehensive audits of airlines are being conducted rigorously, to globally agreed standards, with a very high level of Quality Assurance. More and more of them are being done in all corners of the world on all sizes of airlines. The IOSA audit reports may be released to States by IATA once the approval of the audited airline is obtained. There is no cost at all to States to make use of IOSA. The Conference was requested to consider urging States in Asia and Pacific Regions to encourage all airlines to

undertake the IOSA Audit and for those States to also make use of the audit data in their own programmes.

**1.4 DP/1/3 Application of Industry Safety and Security Codes of Practices for Business Aviation Operations**

1.4.1 The paper was introduced by IBAC. The business aviation operating industry recognizes the significant safety and security value inherent in industry developed and managed codes of practice. Pursuant to these benefits, the industry introduced a code of practice in 2002, called the International Standard for Business Aircraft Operations (IS-BAO). The IS-BAO was developed using current ICAO rule making practices, such as evolving performance based rules, and application of a more systems-based approach to safety management.

1.4.2 The code of practice introduces a Safety Management System (SMS) as the foundation for managing risks. The SMS in the IS-BAO, while scalable, was specifically developed to apply to business aircraft operators who typically have one to three aircraft. The standard also includes a model programme for security and a 'prototypical' operations manual. IBAC urge States to recognize the value of using industry standards to enhance safety and security, as well as their value, in rule making and safety oversight

**1.5 DP/1/4 Modernizing Annex 6 Part II – Standards and Recommended Practices for International General Aviation – Aeroplanes**

1.5.1 This paper presented by IBAC informed the Conference that ICAO and the business aviation operating industry have both recognized for some time that the International Standards and Recommended Practices (SARPs) for General Aviation - Aeroplanes (Annex 6 Part II) are in need of modernization. These SARPs were first introduced in the 1960s when general aviation operations were primarily conducted with small, uncomplicated aircraft, in domestic operations. Over the past 30 years, the use of aircraft by corporations for non-commercial operations for the purposes of conducting business has grown significantly, as have the number of business aircraft operating in the upper level airspace and on international routes. There are now over 24,000 turbine powered business aircraft operating worldwide.

1.5.2 A proposal for modernizing the Annex with the intent of making the rules correspond to current operational practices has been developed by IBAC in consultation with ICAO and is currently under review by the ICAO Secretariat and Air Navigation Commission. It is expected that the amendment proposal will be sent to States in November or December 2006. The proposed amendment separates the Annex into three sections as follows: General Section for Definitions and Applicability; Basic Operations; and Large and Turbo-Jet Aircraft Operations.

1.5.3 Asia Pacific States were encouraged to review the proposals of the Air Navigation Commission for the modernization of Annex 6 Part II and harmonize rules for international general aviation pursuant to the new SARP.

**1.6 DP/1/5 U.S. Approach to Safety Management System (SMS) Implementation: Commercial Air Operators and Approved Maintenance Organizations**

1.6.1 This paper was introduced by a delegate from the United States. The FAA fully endorses the ICAO standards for SMS for commercial air operators and approved maintenance organizations. The FAA believes in a systems approach to safety and the updated SMS

requirements provide practical tools for systemic risk management. The FAA already has developed an air operator SMS standard, similar to the internationally recognized standards for quality, environmental protection, and occupational safety. The FAA is currently planning several proof of concept trials to further develop SMS concepts and implementation methods and is in the process of reviewing existing regulations, standards, and policy documents to determine if changes will be necessary and, if so, to base those changes on results of the proof of concept trials.

1.6.2 The FAA urged States in the Asia and Pacific region to implement the Annex 6 Standards for Safety Management Systems.

**1.7 DP/1/6 Safety Enhancement Efforts and Challenges of Sustainable Practices in Nepal**

1.7.1 Nepal presented this paper which informed the Conference that the Civil Aviation Authority of Nepal (CAAN) is the sole aviation safety regulator and service provider for air navigation services and aerodromes. Amongst its responsibilities are the construction of airport infrastructure, installation of equipment and facilities, operation, maintenance and management of airports. Nepal has pursued a liberal policy for economic regulation of civil aviation and this has led to a significant increase in air transport activities. The Conference was informed about the safety enhancement measures and practices adopted in Nepal to deal with the many challenges.

1.7.2 In order to ensure effective safety oversight, a change in structure, approach and strategy with a greater focus on safety management system (SMS) was considered essential. Nepal considered that a co-operative mechanism was vital to strengthen the safety oversight capability of its regulatory authority. Accordingly, Nepal urged the Conference to continue to support mechanisms such as COSCAP-SA. The Conference was invited to note areas where Nepal believed it would derive significant long-term benefits through the provision of assistance.

**1.8 DP/1/7 ICAO Universal Safety Oversight Audit Program (USOAP) Vision for the Future Following Completion of Current Audit Cycle (2005-2010)**

1.8.1 This paper was presented by the United States. From its beginnings as a voluntary assessment program in 1995, ICAO's compliance monitoring efforts have subsequently evolved into a full-scale mandatory, universal audit program that now encompasses most of the safety-related Standards and Recommendation Practices in 16 of the 18 annexes to the Chicago Conventions. Throughout this evolution, ICAO's primary goal has not been materially altered; i.e. to provide Contracting States with sufficient information so they can make well-informed judgments about the compliance status of other States. Next year, with the benefit of more than two years of experience with the new comprehensive systems approach, ICAO will present a USOAP progress report at the 2007 ICAO Assembly and perhaps address some of its "lessons learned" to date. It is expected that at the Assembly proposals for program adjustment will be presented focusing on improvements for possible implementation at the end of the current 6-year audit cycle (2005-2010).

1.8.2 The paper suggested that ICAO's audit efforts, beginning in 2011, should become a data-driven, continuous monitoring activity that is largely based on safety risk analysis. ICAO should develop and apply safety risk factors to all Contracting States on a continuing basis, analyses that should give consideration to States' Aviation Activity Questionnaire (SAAQ) and Compliances Checklist (CCL) data as well as inputs from its regional offices to address factors within their purview. Such data analyses would be crucial to determining the need for, and timing of, additional data collection in targeted areas, either through the use of actual on-site audit visits

or other effective means. Careful attention would continue to be paid to “exportable activities” addressed in the provisions in Annexes 1, 6, and 8. Not only is this approach appropriate and more efficient, but it will be more effective and more focused on addressing the most pressing identified safety concerns in States.

**1.9 DP/1/8 ICAO Provision of Direct Assistance to Air Operators - ICAO Safety Audits of International Airlines**

1.9.1 The United States explained that one of the recommendations endorsed by last March’s ICAO conference on a global strategy for aviation safety was that “ICAO should consider the feasibility of a scheme, to be approved by the next Session of the Assembly, for ICAO to manage direct assistance to those States having inadequate safety oversight capability and to air operators of such States based on a pool of international safety inspectors and other safety oversight experts made available by States and other stakeholders”.

1.9.2 The United States considered that ICAO’s assistance initiatives should be focused on State, not airline compliance, an area of tremendous need as evidenced by USOAP results to date. In the absence of a compliant State oversight capability, States are not obliged to permit new or continued service by foreign operators, even if they have successfully “passed” audits by an ICAO-managed audit team, an IATA/IOSA team, or any other reliable auditing organization. The United States expressed its view that the proposal even though tentatively endorsed at last March’s ICAO global DGCA conference, should not be adopted at next year’s ICAO Assembly.

**1.10 DP/1/9 Differences to ICAO SARPs**

1.10.1 This paper was presented by the United Kingdom. It observed that the ICAO Universal Safety Oversight Audit Programme (USOAP) comprehensive systems approach has raised awareness of the problems inherent in the current system of identification and notification of differences between a State’s Regulations and ICAO Standards and Recommended Practices (SARPs).

1.10.2 States face some issues when trying to determine their level of compliance with, and any differences from, ICAO provisions and examined the use of the USOAP Annex Compliance Checklists as a tool for this purpose. The United Kingdom questioned the purpose of notification of differences and attempted to answer the question “what is a difference?”. The ICAO Council has been reviewing the guidelines on the Notification of Differences and a plan for an electronic system for the notification of differences has been put in place.

1.10.3 The United Kingdom fully supported the current efforts by ICAO to restore the mutual trust between States, that is so necessary to facilitate international air navigation, through the various programmes such as USOAP, the planned electronic system for the notification of differences and additional measures to improve transparency and availability of relevant safety information as agreed by the DGCA Safety Conference held in March 2006. The United Kingdom pointed out that it was concerned that the potential for “information overload” may prove detrimental to the aims of improving safety. The United Kingdom requested ICAO to reconsider its guidelines on the identification of differences to SARPs to ensure only the important information, of which States need to be aware, is presented.

**1.11 DP/1/10 Managing Compliance with ICAO SARPs and ICAO State Letters**

1.11.1 This paper which was presented by the Republic of Korea provided information on a management tool that has been developed by the Civil Aviation Safety Authority (CASA) of the Republic of Korea (ROK). The objective of the tool was to manage the process for actions to be taken from the receipt of ICAO State letters to the implementation of the new SARPs. The Republic of Korea offered to share the system with the ICAO Contracting States.

1.11.2 ICAO SARPs Tracking System, now named as SARPs Management and Implementation System - the SMIS, was developed to manage the implementation of more than 10,000 SARPs into national regulations. SMIS is a Management System that assigns accountability within the CAA for each SARP and provides senior management with a tool to monitor and control the whole process for SARPs implementation including state letter processing, development or amendment of national regulations, and notification of differences to ICAO. About ten months of operation of the SMIS in the CASA has resulted in increasing the efficiency of managing SARPs and State Letters. It also has contributed to improving aviation safety by reducing the number of non-compliance items from more than 1000 to less than 30 by continued monitoring on the process of actions to be taken based on prepared action plan with deadlines.

1.11.3 The SMIS was first introduced to the international aviation community at the Director Generals of Civil Aviation Conference held in Montreal in March 2006, which noted the system with great interest. In response to such interest and requests for the use of the system from ICAO member States, the Republic of Korea has made the SMIS more advanced and customized than the one originally developed for domestic use. Now SMIS is ready to be shared with the States. The Republic of Korea indicated its willingness to share the system at no charge with the States in the Asia and Pacific region that wish to use it.

**1.12 Discussions on the Papers Presented**

1.12.1 In commenting DP/1/2 on the IATA Operational Safety Oversight Programme (IOSA), Singapore expressed support to the IATA programme and informed the Conference that all Singaporean carriers are undergoing IOSA audits. Foreign AOC holders will also be required to be audited annually.

1.12.2 IATA supported DP/1/5 presented by the United States. The need for cultural change in regard to safety was emphasized and safety management systems should be considered for implementation by all organizations providing services to aviation, for example ground handling services. Singapore echoed the IATA support for DP/1/5 and informed the Conference that Singapore will mandate all air operators and maintenance organizations to implement a safety management system by January 2009, as required by Annex 6. Singapore referred to IP/5/33, which provided details on the implementation of an Integrated Safety Management System in Singapore. DP/1/5 was further supported by CANSO and the Conference was informed that CANSO has issued practical guidance on the implementation of SMS for the industry. The United States expressed appreciation for the feedback provided by the delegates and indicated the United States' strong desire to work in collaboration with the other States on the implementation of SMS.

1.12.3 The US proposal in DP/1/7 for improvements of the USOAP programme after the current 6-year cycle was supported by delegates from Republic of Korea and Australia. It was felt that further discussion would be necessary in order to develop the principle for the transition to continuous safety oversight monitoring.

1.12.4 IATA commented on DP/1/8 presented by the United States. The paper addressed the constrained resources of the Air Navigation Bureau of ICAO with regard to maintaining the ICAO assistance initiatives. It was suggested that these initiatives could be conducted through the technical cooperation mechanisms or following the IATA model of outsourcing. In response to the proposal in DP/1/8 for ICAO to focus on assistance to States, the Secretariat advised that the ICAO Council has endorsed recommendation 2/5 b) 1) of DGCA/06 that requires ICAO to “consider the feasibility of a scheme, to be approved by the next Session of the Assembly, for ICAO to manage direct assistance to States having inadequate safety oversight capability and to air operators of such States, based on a pool of international safety inspectors and other safety oversight experts made available by States and other stakeholders.

1.12.5 ICAO reported that the feasibility study is underway and should be presented to Council in February or March 2007. Although the majority of ICAO actions are directed to States, the mandate given to the Organization by article 44 of the Convention is wider and covers all aspects dealing with safety and efficiency of international civil aviation. ICAO advised the Conference that the most effective way to address safety concerns is a concerted approach by all stakeholders. The ICAO/Industry Global Aviation Safety Road map that is being integrated in the Global Aviation Safety Plan provides the tools for that concerted approach by ICAO, States and the industry. While ICAO will focus on States and Regional issues, there might be cases where ICAO might be in a better position to act on operators or service providers than the industry. Some recent examples of such instances under technical cooperation were provided. In the ensuing discussion, delegates from Australia, United Kingdom and the United States expressed opinions that ICAO should consider focusing on assistance to States only.

1.12.6 The Republic of Korea shared the views expressed in DP/1/9 by the United Kingdom regarding the difficulties the States were facing in meeting their obligations under the Article 38 to the Chicago Convention with respect to the notification of differences between their national regulations and ICAO SARPs. The Republic of Korea also proposed that ICAO should consider restructuring of Annexes and keeping only “notifiable SARPs” in the Annex while the rest of the provisions are included in the relevant Manuals and guidance material. Similar views were expressed by delegates from Australia, Singapore, New Zealand and the United States. The importance of the availability of information on the compliance status of States in the interest of safety and facilitating international air navigation that is clear, relevant and up-to-date was emphasized. The Conference also acknowledged the plans by ICAO to develop an electronic system for the notification of differences based on the USOAP Compliance Check Lists (CCL).

1.12.7 In response to the views expressed, ICAO commented that the interpretation that there were different levels of Standards and that some Standards did not require notification by States when differences in their national practices or regulations existed with those Standards was contrary to Article 38 which states that all differences to Standards, in any respect, are notifiable differences. This was also the policy established by Council concerning the notification of differences by States. However, concerns raised by a number of delegates regarding the need for improvement of the procedures of filing differences deserved consideration. One possibility would be to make better use of Annex 15 provision requiring States to include in the Aeronautical Information Publication (AIP) a list of “significant” differences between the national regulations and practices of the State and the related ICAO SARPs. It was recalled in this regard that the State AIP was a primary reference used by States to exchange information of a lasting character essential to air navigation. ICAO felt that the development of criteria for determining significant differences, as referenced in Annex 15, would make a very valuable contribution to safety as it would facilitate a uniform reporting of differences by States in the AIPs.

1.12.8 After the presentation of DP/1/10, Brunei congratulated the Republic of Korea for developing a very useful product and thanked for the generous offer by the Republic of Korea to provide the SMIS system to all interested Asia Pacific States free of charge. The United Kingdom

also commended the Republic of Korea and requested clarification on the compatibility of SMIS with the ICAO USOAP database, since this was an important condition for the possibility of automatic updates of the States' CCLs through SMIS. In response, the delegate from the Republic of Korea informed that coordination is undergoing with ICAO in order to ensure compatibility of the two systems.

### **1.13 Summation by the Moderator**

1.13.1 The Moderator reflected on the various papers that had been presented and the discussions on them. He noted in particular the concerns expressed in regard to the difficulties some States were facing in meeting their obligations for safety oversight. He noted the overwhelming support to regional cooperation in the field of safety oversight and gave the example of COSCAPs as an efficient mechanisms of regional collaboration.

1.13.2 The Moderator noted further the opportunities for enhancing safety oversight provided by the IATA IOSA programme. He thanked IATA for providing access to the IOSA manuals and registry, which was another source of safety related data for the States.

1.13.3 The Moderator acknowledged the growth of the general aviation and business aviation in the region as discussed in the two papers presented by IBAC. The need for modernizing the ICAO provisions related to the general aviation with due account to the current capabilities of the modern business jets received full support from the Conference.

1.13.4 The Moderator noted the support by the delegates to the need for developing and implementing Safety Management Systems by all aviation organizations including the aircraft management organizations as suggested in DP/1/5 presented by the United States.

1.13.5 On the development of the ICAO USOAP after completion of the current audit cycle discussed in DP/1/7, the Moderator pointed out the proposals for improvements and implementation of safety oversight audit based on risk analysis of the accumulated audit data and focusing on the most critical areas. The Moderator further noted the views expressed by several delegates that ICAO should focus its assistance to States, rather than airlines, since States had the primary responsibility for safety oversight. He acknowledged the ICAO position on this subject which was essentially expressed in the Article 44 of the Convention.

1.13.6 Regarding the difficulties in complying with the ICAO provisions related to filing of differences and maintaining at the same time the related USOAP CCLs, which were reported by UK and confirmed by a number of delegates, the Moderator acknowledged the heavy workload generated by the current process of reporting differences to ICAO. He noted the views expressed by a number of delegates that ICAO should consider providing additional guidance to States on notification of differences including proposal for review of Article 38. He noted also the proposal by ICAO for improving the reporting of significant differences through the States' AIPs.

1.13.7 The Moderator expressed appreciation to the Republic of Korea for developing a comprehensive system for managing compliance with ICAO SARPs and actions on ICAO State letters. He thanked the Republic of Korea for its generous offer to provide the SMIS system to the Asia Pacific States at no cost and pointed out that this was an excellent example of regional cooperation.

1.13.8 In summing up the Moderator noted that Asia/Pacific is positioned well to enjoy continued above-average growth and to increase its share of global traffic. However, the Moderator reminded the Conference that if this growth is to be sustained it must be accompanied

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by effective regulation and observed that there were many excellent contributions in this regard and urged the Conference to give the matters raised their deepest consideration.

1.13.9 The Moderator thanked all delegates for the active participation in the deliberations on this agenda item.

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## **AGENDA ITEM 2**

# **REVIEW OF ACTION ITEMS ARISING FROM THE 42<sup>ND</sup> CONFERENCE**

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEM 2: REVIEW OF ACTION ITEMS ARISING FROM  
THE 42<sup>RD</sup> CONFERENCE**

**Moderator: Mr. H.M.C. Nimalsiri  
Director General of Civil Aviation & Chief Executive Officer  
Civil Aviation Authority of Sri Lanka**

**2.1** Three (3) Discussion Papers and one (1) Information Paper were received under this agenda item. The three Discussion Papers were presented:

REF.	TITLE	PRESENTED BY
<b>AGENDA ITEM 2</b>	<b>REVIEW OF ACTION ITEMS ARISING FROM THE 42<sup>ND</sup> CONFERENCE</b>	
DP/2/1	Report on Responses to Action Items Arising from the 42nd Conference of the Directors General of Civil Aviation in Asia and Pacific	ICAO
DP/2/2	Review of the Asia Pacific Consultative Link	Australia
DP/2/3	Enhanced Representation and Cooperation for Asia and the Pacific	IBAC

**2.2 DP/2/1 Report on Responses to Action Items arising from the 42nd  
Conference of the Directors General of Civil Aviation in Asia  
and Pacific**

2.2.1 The ICAO Secretariat provided details of the actions taken by various States on the Action Items arising from the 42nd Conference of DGCA's.

2.2.2 A review of the number of responses to the DGCA Conference Action Items during the last five Conferences indicated slight positive trend, however, the responses received prior to the 43rd Conference (on the follow up of the Action Items formulated by DGCA/42) were less than those received prior to the 42nd Conference.

2.2.3 The 42nd Conference requested the Directors General to provide to the ICAO Regional Office a summary of actions taken, within six months of the Conference, and to provide a follow-up report at least two months prior to the next (43rd) Conference. Subsequently, the ICAO Regional Office issued a letter on 27 January 2006 reminding the Directors General of the need to respond to the List of Action Items within six months of the last Conference, and a copy of the List was attached. In view of the very poor response to this letter, the matter was again included in a reminder letter dated 1 September 2006, at which time (more than six months after the Conference) very few responses were received.

2.2.4 By 1 December 2006 responses were received from 21 Administrations. It was noted with appreciation that the responses are more comprehensive than in previous years and generally cover most of the Action Items.

2.2.5 The Secretariat further presented a summary of the responses by Administrations on all Action Items. After a thorough review, ICAO proposed that seven of the eleven Action Items formulated by the 42<sup>nd</sup> Conference be deleted based on the follow up actions reported by the Administrations. It was proposed that four Action Items: 42/2 (on resolution of deficiencies), 42/4 (on Regional safety monitoring), 42/9 (on English language proficiency), and 42/11 (on introduction of Machine Readable Passports) be retained, with suitable amendments, based on subsequent deliberations under appropriate Agenda Items.

### **2.3 DP/2/2 Review of the Asia Pacific Consultative Link**

2.3.1 In presenting this paper, a delegate from Australia explained that it was agreed at the 42<sup>nd</sup> DGCA Conference in September 2005 that an Asia Pacific Consultative Link (APCL) between the ICAO Member States of the Asia and Pacific regions be established. This Consultative Link would provide a platform for effective communication between States in the Asia and Pacific regions in order to provide the opportunity for identification and discussion of issues of regional importance.

2.3.2 This paper reviewed the operation of the APCL over the last 12 months and acknowledged that it had not yet achieved all of its objectives. The paper suggested continuation of the APCL with improvements, focused on achieving better communication and greater participation for endorsement by the Conference.

### **2.4 DP/2/3 Enhanced Representation and Cooperation for Asia and the Pacific**

2.4.1 This paper was presented by Australia on behalf of a Working Group of representatives from Cambodia, China, the Democratic Peoples Republic of Korea, Japan, Malaysia, Mongolia, New Zealand, Pakistan, the Republic of Korea, Samoa, Singapore, Tonga, Vanuatu and Australia.

2.4.2 The paper recalled that it was agreed at the 42<sup>nd</sup> DGCA Conference that a Working Group of interested States would be formed to progress the development of a long term strategy for achieving enhanced cooperation and representation for the Asia and Pacific regions.

2.4.3 The paper outlined major areas of discussion of the Working Group including access to Council documentation, existing cooperative approaches within the region, the role of the ICAO Regional Office in Bangkok, and the Asia Pacific Consultative Link (APCL).

2.4.4 The paper concluded that more work needed to be done to develop a longer term strategy. The paper recommended that efforts be focused on the short to medium term with priority being given to the development of the APCL as the best means of achieving enhanced cooperation and representation for the Asia and Pacific regions.

### **2.5 Discussions on Papers Presented**

2.5.1 In commenting on DP/2/2, Japan thanked Australia for its good work in serving as a focal point for the Asia Pacific Consultative Link. Japan noted difficulties experienced in obtaining responses but emphasized that this was a valuable initiative and that the importance of maintaining this activity in Asia and Pacific Regions was noted. Japan stated that it was currently not in a position to take up the function and requested Australia to continue as the focal point for the next 12 months.

2.5.2 Also commenting on DP/2/2 the ICAO Secretariat acknowledged the initiative taken in establishing the APCL. Appreciation was expressed concerning the desire to involve the Regional Office as expressed in references to ICAO throughout the paper. It was noted as well that the APCL was not intended to duplicate existing means of communication, especially between ICAO and the States. ICAO drew the attention of the Conference to existing ICAO service codes and protocols and informed that the matters raised in DP/2/2 were under consideration by the Organization. The ICAO Secretariat emphasized that the existing communication channel between ICAO and the States were robust and constituted many thousands of exchanges on an annual basis.

2.5.3 China also expressed its appreciation of Australia's work on the APCL and agreed with Japan that this was a useful mechanism. Considering that China would be the host for the 44th Conference of Directors General in Asia and Pacific in October 2007 it did not feel that it could assume the role as focal point. Accordingly, China requested Australia to continue playing this role.

2.5.4 Australia thanked Japan and China for their support and agreed to support the APCL as its focal point. Australia undertook to work with participants to make the mechanism more useful. Australia also thanked ICAO for its interventions and appreciated guidance on constructive and acceptable ways to proceed. Australia also drew attention to IP/2/4 – "Annual Report of the Montreal Group of Asia/Pacific Council Representatives" submitted by the Republic of Korea on behalf of the Montreal Group.

2.5.5 The United Kingdom sought clarification on the measures of aviation activity summarized in Section 2.6 of DP/2/3. Australia reported that the statistics had been obtained from ICAO and reflected aviation activity in the various regions.

## **2.6 Summation by the Moderator**

2.6.1 The Moderator, in summing up, noted the appreciation expressed for Australia's work in establishing the APCL and the desire of the meeting that Australia should continue to be the focal point for the next year. On behalf of the Conference, the Moderator thanked Australia for agreeing to continue working in this capacity. The Moderator also drew attention to the information in DP/2/3 to enhance regional communications and the need to carry out more work on a longer term strategy.

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**AGENDA ITEM 3**

**AIR NAVIGATION PLANNING AND  
IMPLEMENTATION**

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEM 3: AIR NAVIGATION PLANNING AND IMPLEMENTATION**

**Moderator: Mr. Wong Woon Liong  
Director-General  
Civil Aviation Authority of Singapore**

**3.1** Nine (9) Discussion Papers and four (4) Information Papers were submitted for this Agenda Item. the following nine (9) Discussion Papers were presented:

<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
<b>AGENDA ITEM 3</b>	<b>AIR NAVIGATION PLANNING AND IMPLEMENTATION</b>	
DP/3/1	APANPIRG Activities - Outcomes of APANPIRG/17	ICAO
DP/3/2	ATFM Procedures	ICAO
DP/3/3	Aerodrome Certification & Status of Implementation in the Asia/Pacific Region	ICAO
DP/3/5	Worldwide Symposium on Performance of the Air Navigation System	ICAO
DP/3/6	Air Navigation Deficiencies	ICAO
DP/3/7	Proposal for the Development of Air Route in Nepal	Nepal
DP/3/9	The Implementation of Reduced Vertical Separation Minimum (RVSM) in China	China
DP/3/12	Bay of Bengal Cooperative Air Traffic Flow Management Advisory System (BOBCAT)	Thailand
DP/3/13	U.S. Approach to Safety Management System (SMS) Implementation: Certificated Airport Operators	United States of America

**3.2 DP/3/1 APANPIRG Activities – Outcome of APANPIRG/17**

3.2.1 This paper presented by ICAO, highlighted some of the important issues and the overview of the outcome of APANPIRG/17, which was held at the ICAO Asia/Pacific Regional Office, Bangkok, Thailand from 21 to 25 August 2006. The meeting was attended by 85 participants from 20 States and 3 International Organizations. The meeting report is available on the regional office web site: [www.icao.int/apac](http://www.icao.int/apac). APANPIRG/17 adopted 44 Conclusions urging States and ICAO to take appropriate actions. The meeting also formulated 11 Decisions tasking Sub-groups, the Regional Air Space Monitoring Advisory Group and Task Forces of APANPIRG to take follow-up actions.

3.2.2 The Conference acknowledged that APANPIRG/17 had made significant progress by completing the required action on 12 out of 17 outstanding conclusions/decisions. The meeting also noted the follow-up actions by the States and Secretariat in response to the forty-seven

conclusions and fifteen decisions formulated by APANPIRG/16 with fifty-three items completed, which resulted in 85% completion of the planned action within one-year period.

3.2.3 The Conference was further presented with some of the major activities of APANPIRG in the different air navigation fields, as follows.

3.2.4 ATM/AIS/SAR Planning and Implementation Activities

3.2.4.1 RASMAG had identified two safety matters that required urgent attention. These were the overdue horizontal safety assessment for the South China Sea Route Network and the high number of Large Height Deviations (LHD) occurring in the Western Pacific/South China Sea (WPAC/SCS) area which had led to the RVSM Target Level of Safety (TLS) for this area not being met. There were significant safety matters outstanding in relation to WPAC/SCS operations that needed to be urgently addressed, therefore, APANPIRG/17 decided to establish a WPAC/SCS RVSM Scrutiny Working Group (Decision 17/5 refers). As regards the outstanding horizontal safety assessment for the South China Sea parallel route structure, the group urged the States concerned to complete, by 30 June 2007, a horizontal safety assessment in accordance with ICAO ATS safety management provisions (Conclusion 17/6 refers).

3.2.4.2 The RVSM Task Force (RVSM/TF) conducted a 90-day Review of RVSM Implementation in the Incheon, Naha and Tokyo FIRs, and review of the FLOS for the Western Pacific/South China Sea Area. The last remaining scheduled meeting of the RVSM/TF was the one-year-review of the Japan and the Republic of Korea RVSM implementation (RVSM/TF/29), to be conducted in November 2006.

3.2.4.3 The meeting noted the implementation of conditional ATS routes by India, Japan and Republic of Korea that addressed the intent of the fuel savings measures, including revision of procedures and ATS route structures in order to achieve maximum efficiency. The meeting noted that the benefits derived from conditional routes were not only reduced flight mileage and time, fuel saving, and reduced CO<sub>2</sub> emission but also enhanced ATS safety, and effective civil-military coordination. In view of the benefits resulting from the implementation of CDRs, the meeting urged the ASIA/PAC States to implement such conditional ATS routes and route segments.

3.2.4.4 APANPIRG/17 reviewed the progress in the implementation of ATS Routes according to the *Asia/Pacific ATS Route Catalogue*, which was adopted by APANPIRG/16 as a regional planning tool. The meeting noted in particular the RNAV implementation plan of Japan, the implementation of nine routes in Chapter 5 (User Requests) of the Route Catalogue, as well as, several routes contained in Chapter 4 (States Requirements).

3.2.4.5 The ATM/AIS/SAR Sub-group at its 16<sup>th</sup> meeting in June 2006 expressed concerns at the lack of suitable SARPs and guidance materials to regulate the wide proliferation of UAV activities across the region, particularly in sovereign airspaces. It was requested that mechanisms be put in place to ensure that affected States of the region were kept fully informed of progress in these matters and were given opportunity to provide input to discussions.

3.2.4.6 In light of the longstanding difficulties in contingency planning, an ICAO Special Implementation Project (SIP) was conducted in 2006 with the assistance of Indonesia, Malaysia and Singapore. As a result, National ATM Contingency Plans for Jakarta and Ujung Pandang FIRs were developed. The final version of these plans will serve as a useful model for other States in the Region in preparing ATM contingency plans (Conclusion 17/11 refers).

3.2.4.7 The Conference noted the information regarding the operational trial by the Air Traffic Flow Management Task Force (ATFM/TF) of an automated flow management tool (Bay of Bengal Cooperative ATFM Advisory System (BOBCAT), developed by AEROTHAI, Thailand. The purpose of the BOBCAT trial is to manage the flow of traffic across the Bay of Bengal

transiting the Kabul FIR during the night time peak traffic period (2000-2359UTC). Following a satisfactory ghosting performance, the trial commenced an operational phase on 24 July 2006. More information on this important development was provided in DP/3/2.

3.2.4.8 On AIS matters, the Conference was informed that the combined AICM/AIXM Management Seminar and First Meeting of the AIS Implementation Task Force (AITF/1) were held at the Regional Office in March 2006. The objective of the Task Force is to maintain continuous watch on the AIS-related potential deficiencies, such as: implementation of digital terrain data; implementation of digital aeronautical charts; implementation of AIS Quality Systems; AIRAC adherence; and AIS Automation. APANPIRG/17 supported the initiative of AITF/1 to conduct a comprehensive regional AIS Survey in 2007 (Conclusion 17/16 refers).

3.2.4.9 The meeting reviewed and updated the APANPIRG list of SAR Agreements and the SAR Capability Matrix Table. The meeting was also updated on the ICAO SAR SIP for the Pacific Island which will be conducted as a SAR Workshop, to be held at the Regional Office from 26 February to 2 March 2007.

### 3.2.5 CNS and MET Planning and Implementation Activities

3.2.5.1 The meeting noted the tasks accomplished by the First Meeting of the ATN Implementation Coordination Group (ATN/ICG), Seoul, May 2006, including development of a work programme in accordance with the ICAO Strategic Objectives. APANPIRG/17 adopted a revised Strategy for the ATN Implementation to permit deployment of network approach for the provision of dual stack ISO/OSI and IPS protocols.

3.2.5.2 The Group considered necessary for ICAO to continue organizing appropriate workshops/seminars to facilitate the orderly adoption of the Performance Based Navigation (PBN) concept and called for a PBN Seminar in Asia/Pacific in 2007 (Conclusion 17/23 refers).

3.2.5.3 The Regional Strategy for the Provision of Approach, Landing and Departure Guidance Systems was revised to include the new performance based navigation concept and the recognized value of departure guidance. (Conclusion 17/24 refers)

3.2.5.4 The meeting noted that ADS-B related trials, validation/monitoring programmes, initial implementation projects and implementation planning were carried out by a number of States in the Region and tasked the CNS/MET Sub-group to develop a regional strategy for implementation of surveillance system and report to the next APANPIRG meeting.

3.2.5.5 In further reviewing the ADS-B implementation and related cost-benefit analyses, the meeting noted the IATA opinion that the Asia/Pacific Region should focus on near term use and implementation of ADS-B OUT and Mode S Enhanced Surveillance. The meeting developed revised terms of reference for the ADS-B Study and Implementation Task Force (ADS-B SITF) emphasizing that the task force should focus on developing further implementation plans for the near term ADS-B applications and compare alternative technology/solutions for surveillance (Decision 17/28 refers).

3.2.5.6 APANPIRG/17 reinstated the need for improvement of SIGMET availability and quality and agreed that a regional performance objective should be established in this regard. A target of 95% availability of SIGMET test bulletins from all MWOs listed in FASID Table MET 1B to be achieved in a two-year time frame was considered as a proper performance indicator. The meeting further considered a proposal for organizing a training seminar for the States' SIGMET Focal Points in 2007.

3.2.5.7 The Conference noted the information regarding the regional MET/ATM coordination seminar which was held at the Regional Office in February 2006. The importance of

the meteorological information for the current and future air navigation systems was emphasized. A number of new MET products tailored made to fit to the new ATM requirements had been presented. A regional survey of the evolving requirements for meteorological information and services in support of air traffic management will be conducted in 2007.

### 3.2.6 Other Air Navigation Matters

3.2.6.1 The meeting noted the global consensus that voluntary funding arrangements were not considered sustainable in the long-term, and that the most appropriate funding mechanism for RMAs was to establish a multinational (ICAO) facility/service. This was considered an effective mechanism to address additional, recognized safety monitoring requirements for SMAs and CRAs. More information on this important matter was provided in DP/5/5.

3.2.6.2 The meeting noted with concern the extraordinarily high level of oil prices threatened the airline industry with another year of losses. Consequently, the meeting discussed the areas where ATS Providers and State ATS Authorities could assist in developing more efficient systems that would contribute to airlines internal fuel efficiency strategies. IATA greatly appreciated the responses and actions that States had taken to date. The meeting encouraged States to continue with ATM improvements leading to increased fuel efficiency.

### 3.2.7 CNS/ATM implementation and related activities

3.2.7.1 The Meeting reviewed the draft second amendment of the Global Air Navigation Plan, which was aimed at achieving a global ATM system. The new Global Plan contained 23 Global Plan Initiatives (GPIs) and incorporated the performance-based approach to measuring success with implementation. The revised planning process would be facilitated through planning tools, an electronic air navigation planning database, project and programme management techniques and new reporting methodologies. The Meeting took note of the performance planning activities by the ANC panels as well as proposed ICAO Performance Symposium in March 2007.

### 3.2.8 Deficiencies in the Air Navigation Fields

3.2.8.1 APANPIRG/17 accorded highest priority to establishing effective mechanisms to expedite the resolution of the safety related deficiencies took place. The meeting adopted four conclusions and one decisions on the subject. Detailed information on APANPIRG plan for elimination of air navigation deficiencies was provided in DP/3/6

### 3.2.9 Future Work Program

3.2.9.1 With regard to improving efficiency of APANPIRG through the use of information technology, the meeting welcomed and commended a number of measures put in place by the Regional Office. It included provision of electronic documentation for the meetings of APANPIRG and its contributory bodies; utilization of wireless LAN facilities which allowed conducting paperless meetings; dissemination of meeting reports through posting on the web site; remote participation in meetings through teleconferencing and WebEx service; distribution of State letters and other important correspondence by email and web posting.

3.2.9.2 The meeting adopted a new format of presentation of its conclusions and decisions as a Follow-up Action Plan. The Action Plan indicates for each APANPIRG/17 conclusion/decision: relating ICAO Strategic Objective(s), specific action to be taken, responsible body (e.g., Regional Office, States, ICAO HQ), expected deliverable, and the target date for completion of the action.

3.2.10 In conclusion, the Conference was invited to note that APANPIRG was a very effective mechanism in view of the transition to performance based, result-oriented approach in the

regional planning and implementation process. APANPIRG continued to play a leading role in furthering the development and implementation of the regional air navigation system. To achieve its objectives, the Group undertook steps to align its work programme with the ICAO Strategic Objectives and Global Plan Initiatives.

### **3.3 DP/3/2 ATFM Procedures**

3.3.1 In this paper presented by ICAO the Conference was informed of the efforts by a group of States, international organizations and airspace users in conducting an ATFM operational trial of an automated flow management tool for regulating the flow of traffic across the Bay of Bengal transiting the Kabul FIR during the night time peak traffic period. The trial has been conducted using a web based automated Bay of Bengal Cooperative ATFM Advisory System (BOBCAT) developed by AEROTHAI, Thailand specifically for this purpose.

3.3.2 The Conference noted that the task being addressed was extremely complex and required cooperative endeavors from air traffic controllers in more than 15 separate ACCs and Control Towers in 6 primary States, as well as from the pilots and dispatchers of the 25 or so airlines involved. The Conference also noted feedback from the Kabul ACC that, even in its early stages, the ATFM operational trial had a direct and measurable safety benefit for all stakeholders. However, there were outstanding difficulties related to non-participation by a number of airlines, as well as, non-compliance with the ATFM procedures by some of the participating airlines and ANSPs. Accordingly, assistance was sought from Directors General in ensuring that all participants fully comply with the ATFM trial procedures as a precondition for taking full advantage of the improved traffic flow management.

3.3.3 The Conference acknowledged the importance of the ATFM operational trial and commended the participating States, IATA and the 25 or so airlines for their cooperative actions under the guidance of the Asia/Pacific Regional Office to assist efficient transit of the Kabul FIR.

### **3.4 DP/3/3 Aerodrome Certification & Status of Implementation in the Asia/Pacific Region**

3.4.1 This paper, which was presented by ICAO, provided information on the new standard introduced by ICAO in March 2001 requiring aerodromes used for international operations to be certified in accordance with the specifications contained in ICAO Annex 14, Volume 1, with effect from 23 November 2003. To assist States in framing the procedure for aerodrome certification, ICAO has published guidance materials (Document 9774, Manual on certification of aerodromes, and Doc 9859, Safety Management Manual) and organized regional workshops on aerodrome certification and safety management system.

3.4.2 ICAO undertook a survey to assess the level of implementation by States of the aerodrome certification provisions. 19 Administrations out of 42 participated in the survey. It was seen that aerodrome certification requirements had been well accepted and understood across the Asia Pacific Region with the development of fairly uniform procedures. States that had not responded to the ICAO survey were urged to provide their response as soon as possible. States were also urged to allocate high priority and adequate resources in implementing the requirements of aerodrome certification and safety management system for aerodromes.

**3.5 DP/3/5 Worldwide Symposium on Performance of the Air Navigation System**

3.5.1 In this paper presented by ICAO, the Conference's attention was drawn to a letter sent to States by the Secretary General of ICAO inviting them to participate in an ICAO Worldwide Symposium on Performance of the Air Navigation System which would be held in Montreal from 26 to 30 March 2007. ICAO explained that this was a follow-up activity arising from the Eleventh Air Navigation Conference (AN-Conf/11) held in 2003, during which a performance framework for the air navigation system was outlined, based on the global air traffic management operational concept.

3.5.2 The Conference was informed about the scope of discussions that would be promoted at the symposium on the various dimensions of performance, namely: safety; economics and management; operations; and technical. It was explained that the symposium would deal with substantive matters in a comprehensive, in-depth manner. Accordingly, it was expected that the symposium would be a milestone in shaping the successful and continued development of international air transport into the future. Accordingly, the Conference was invited to urge States in Asia and Pacific to participate to the maximum extent in the symposium, recognizing that the invitation extended by ICAO requested a reply concerning attendance not later than 22 December 2006.

**3.6 DP/3/6 Air Navigation Deficiencies**

3.6.1 This Paper was presented by ICAO. The Conference was informed that the APANPIRG/17 Meeting accorded highest priority on the elimination of air navigation deficiencies in the Asia/Pacific Region. The meeting adopted four conclusions and one decision and established a regional performance objective in relation to the resolution of safety deficiencies. In its conclusion 17/54 b) the meeting requested that the attention of the DGCA/43 conference be drawn to the APANPIRG planned actions relating to the elimination of the deficiencies and to seek the support and collaboration of the Conference in this regard.

3.6.2 The Conference was advised that the States listed in APANPIRG List of Deficiencies were urged strongly to prepare remedial Action plans by mid 2007 and notify ICAO Regional Office accordingly. APANPIRG/17 developed other proposals for provision of assistance to States in the elimination of deficiencies funded by ICAO Special Implementation Project or through the Technical Co-operation Programme. In order to provide up to date information on the status of the air navigation deficiencies in the region and track the progress of their elimination, the Regional Office will develop in 2007 an on-line deficiency data base.

**3.7 DP/3/7 Proposal for the Development of Air Route in Nepal**

3.7.1 In presenting the paper, Nepal described the limitations of the current air route structure in Nepal. In the light of the evolving air navigation technologies, Nepal proposed new routes which ran across the Himalayas and north-south as well as east-west of the Nepalese airspace. It was expected that the new routes would provide enormous benefits to the international operators.

3.7.2 CAA Nepal urged all concerned States and Authorities towards materializing the proposed routes through Nepal to ease the traffic flow south of the Himalayas and provide multiple benefits to the international operators in terms of distance, fuel and time, which will ultimately minimize the operating cost of airlines. The implementation of these routes will be possible only with the cooperation from the concerned States such as China, India, Myanmar, Bangladesh, Pakistan, and Nepal in close coordination with ICAO and IATA.

**3.8 DP/3/9 The Implementation of Reduced Vertical Separation Minimum (RVSM) in China**

3.8.1 In this paper China outlined the difficulties it faced with RVSM implementation which also were faced by some of its neighboring States due to the use of a metric flight levels system. Nevertheless, China was in need for a better utilization of high airspace resources to accommodate the ever-increasing air traffic.

3.8.2 The greatest challenge in RVSM implementation in China is the conversion from meters to feet, which results in errors due to rounding. Therefore, it was extremely important to conduct a safety study on the implementation of RVSM in the Chinese metric flight level environment and define such a flight level system that is operationally acceptable and safe for both pilots and air traffic controllers. The Conference was informed of a radar simulation study conducted by CAAC ATMB for different RVSM FL options in Guangzhou Area Control Center in November, 2006. After careful study and radar simulation, it was recommended that the Metric RVSM Flight Level System should be adopted, which would meet the requirements of the military aviation to use metric flight levels, and would also inherit the present metric characteristics of China's flight levels and overcome the problems of relatively large altitude difference between metric RVSM flight levels and ICAO RVSM flight levels of neighbouring countries.

3.8.3 China also recognized the importance of the human factor in the implementation of the RVSM program. China requested that ICAO Asia and Pacific Regional Office and the RVSM Task Force to continue their role in promoting the implementation of RVSM in Asia and Pacific Region, and facilitate the coordination for harmonization of the flight level structure in the China, Mongolia and Russia sub-region when they implement RVSM.

**3.9 DP/3/12 Bay of Bengal Cooperative Air Traffic Flow Management Advisory System (BOBCAT)**

3.9.1 This paper presented by a delegate from Thailand provided information on the ATFM operational trial, in particular, on the role played by AEROTHAI, Thailand.

3.9.2 The Bay of Bengal Cooperative Air Traffic Flow Management Advisory System (BOBCAT) was developed by AEROTHAI as a result of the work conducted by the ATFM Task Force, described in DP/3/2. BOBCAT was designed as an Advisory system and was used by AEROTHAI to strategically manage the air traffic flows on behalf of all participating States participating in the ATFM trial.

3.9.3 The paper provided technical details on the way BOBCAT was operated by AEROTHAI through its Air Traffic Flow Management Unit (ATFMU). In addition, results from the operational ATFM trial conducted between 24 July and 24 November were presented. The Conference was advised that, apart from a few issues, the new procedures worked very well. The airlines for the most part had a sound understanding of the ATFM system and were eagerly interacting with BOBCAT to gain the best slot allocation for their aircraft. The trial demonstrated significant benefits for all stakeholders. The paper stressed that in order to improve the performance of the system, the participation of all airlines entering the Kabul FIR was crucial.

**3.10                    DP/3/13                    U.S. Approach to Safety Management System (SMS)  
Implementation: Certificated Airport Operators**

3.10.1                    This paper was presented by a delegate from the United States. The Conference was informed that the United States fully endorsed the ICAO concept of safety management system for certified airport operators (reference amendment 7 to Annex 14 requires airport operators to establish a safety management system with applicability date of 24th March 2005). FAA was in the process of implementing airport SMS and FAA regulations were being amended to include SMS as part of the certification process.

3.10.2                    The airport certification procedure will incorporate the regulatory requirements for SMS and will comply with ICAO Annex 14 Standards. To this effect work has already commenced in examining existing airport certification regulations, standards and policies and is in the process of formulating a strategy to meet Annex 14 Standards. The FAA will issue an Advisory Circular early next year on introduction of SMS processes and also develop a hand book for use by airport certification and safety inspectors. Starting this year FAA will collaborate with airport operators implementing SMS as pilot projects and use the results to review policies and guidance for other airport operators. The FAA research and guidance material is available at [www.faa.gov](http://www.faa.gov).

**3.11                    Discussions on Papers Presented**

3.11.1                    In opening the discussion on DP/3/1, the Moderator acknowledged the huge amount of work undertaken by APANPIRG and its contributory bodies which was very difficult to reflect adequately in a short presentation. Therefore, he encouraged the Directors General to study the full report of APANPIRG/17 and to provide full support to the experts from their Administration who contributed on a continuing basis to the APANPIRG work programme.

3.11.2                    In his comments, the observer from IATA congratulated APANPIRG for the work done. He pointed out developments of particular interest from the users point of view, such as:

- the utilization of conditional routes was of great value for the airlines providing increased availability and capacity of airspace during night time;
- the progress with the implementation of air routes included in the Asia/Pacific Route Catalogue was commended but a lot was yet to be done;
- IATA was eager to see further implementation of ADS-B, however, regional issues still existed in particular related to certification of transponders;
- For IATA, another source of concern was the decreasing resources of the Regional Office versus the ever increasing demand of the regional implementation programme. Directors Generals were encouraged to consider ways of assisting the Regional Office by providing additional resources through seconded personnel.

3.11.3                    Australia commended the revision of the terms of reference of the ADS-B Task Force done by APANPIRG/17, which put better focus on the work of the task force by providing better guidance to States for near term ADS-B applications. IBAC reiterated the views expressed by IATA on outstanding implementation issues and focused attention on the rapid growth of the business aviation which necessitated that the regional planning and implementation activities should take into account the capabilities of the modern business jets.

3.11.4 Singapore reiterated its continuous support for APANPIRG. This support manifested in terms of strong participation in different groups and task forces, including chairmanship, hosting of meetings and workshops.

3.11.5 Responding to the concerns expressed by IATA with regard to the resource constraints of the Regional Office, ICAO Secretariat acknowledged that this state imposed stressful workload on the Regional Office staff. APANPIRG/17 acknowledged this condition and it was expected that certain measures would be undertaken to improve the situation. The ICAO Secretariat also reiterated the need for clarifying certain misconceptions that APANPIRG as the regional body was involved in planning only. Contrary to this APANPIRG was fully engaged in implementation and a number of achievements in this regard were cited. Participation of the States and provision of leadership to the APANPIRG activities through chairmanship, rapporteurs and experts was highly appreciated.

3.11.6 IATA commended the ATFM activities presented in DP/2/12 by Thailand and DP/2/2 by ICAO. It was an excellent example of APANPIRG led implementation. It started with a request by IATA to APANPIRG/15 and materialized in the current operational trial conducted by the ATFM/TF. The benefits are already evident and they are benefits for all stakeholders. IATA commended the effort by AEROTHAI, Thailand and other participants in this extremely important project. IATA reiterated the need for all States and all airlines concerned to participate in the ATFM operational trial and abide by the established procedures in order to ensure full success of the BOBCAT.

3.11.7 In commenting on the ATFM operational trial, Singapore also appreciated the effort by Thailand and it was stressed that all current operational issues should be solved before BOBCAT is considered for operational implementation.

3.11.8 Several delegates commented on the issues of airport certification and implementation of SMS requirements of Annex 14. The Conference took note of the ICAO survey presented in DP/3/3 and noted that only 10 States in the Region had implemented SMS. It was stressed that some States experienced difficulties in the development of SMS and assistance from ICAO would be required in this regard. In response, the ICAO Secretariat advised Brunei Darussalam that assistance to States for SMS implementation including training is being provided by the COSCAPs. Brunei Darussalam was urged to join COSCAP and take full advantage of its assistance to states which comes at minimal cost.

3.11.9 The Conference was informed of the programme for airport certification in Indonesia under which 187 airports in Indonesia were in process of obtaining certification and it was planned that by the end of 2006 about 50 airports would be certified. Hong Kong, China pointed out that the cost for the airport certification, which was indicated in the ICAO survey, could vary significantly. The actual spending for the certification of Hong Kong International Airport exceeded one million US dollars. At the same time, some of the responses to the ICAO questionnaire showed much lower figures of a few thousand dollars. Hong Kong, China called for exchange of information between the States on the actual cost based on their experience. The ICAO Secretariat offered to facilitate the exchange of this information, which was appreciated by the Conference.

3.11.10 The Conference was advised that the Singapore Aviation Academy had been running courses on SMS for airports since 2003. States were encouraged to take advantage of the facility accordingly.

3.11.11 The intention of Nepal to implement new air routes described in DP/3/7 was commended by IATA in view of the expected benefits in terms of reducing congestion of the air space and shortening the routes. China advised that the proposal for these new routes will be studied carefully. The ICAO Secretariat, while acknowledging the potential benefits in terms of

efficiency, environment and related matters, advised Nepal that in order to facilitate the implementation of the proposed new routes, Nepal should raise the issue through the established ICAO procedures.

3.11.12 The presentation of DP/3/9 on the RVSM implementation plans by China generated active discussion. Singapore expressed support to China and advised that he RVSM/TF, currently chaired by Singapore could assist in this implementation. On the question of the target date, China responded that all effort will be made to implement RVSM as soon as possible and preferably before the Olympic Games in 2008, however a firm target date had not been established yet. IATA confirmed that China urgently needed RVSM. It was recommended to target implementation on some of the routes earlier. Issues and difficulties were fully understood and coordinated plan with participation of ICAO and as many neighboring States as possible was strongly recommended. Myanmar informed the Conference that it had implemented RVSM and supported the RVSM implementation by China. He also indicated that improvement could be made to the existing RVSM structure. Support of China's RVSM implementation plan was also expressed by IFALPA, Indonesia and Japan. Japan stated their strong need for expanded capacity of the ATS route between Japan and China.

### **3.12 Summation by the Moderator**

3.12.1 In summarizing the deliberations, the Moderator acknowledged the progress made by APANPIRG and emphasized the need for the Directors General to continue providing full support to the regional planning and implementation group. The Moderator echoed the concerns in regard to the decreasing resources of the Regional Office and reinforced the need for the States to participate actively in the regional air navigation work programme.

3.12.2 The Moderator stressed the importance of APANPIRG initiatives and called for even stronger effort in resolving safety deficiencies as described in DP/3/6. He strongly recommended to the Conference that the proposed course of action by APANPIRG, which included development of action plans by all states concerned by mid 2007, should be supported by a relevant action item.

3.12.3 In summarizing, the Moderator stressed the importance of the ICAO provisions relating to airport certification and implementation of SMS under the Annex 14. He invited the Conference to consider an action calling for certification of all international airports in the Region as soon as possible. It was pointed out in this regard that the non-certification will be considered as a deficiency by the ICAO safety oversight auditors. To avoid this, the implementation of SMS and certification of the airports should be addressed by the States through aggressive national programmes intended to show rapid progress during 2007. The Moderator also thanked the United States for sharing its experience on the airport certification in DP/3/13.

3.12.4 Regarding the information presented by ICAO on the Worldwide Symposium on Performance of the Air Navigation System to be held in March 2007, the Moderator strongly encouraged delegates to take note and participate in this important global event. The Moderator appreciated the lively discussion on RVSM implementation plans by China and reiterated that RVSM implementation has improved both safety and efficiency. He stressed the need for harmonization and urged all States concerned to participate in the process. Finally, the Moderator requested the Conference to commit to the elimination of regional air navigation deficiencies

43<sup>rd</sup> Conference of Directors General of Civil Aviation  
Asia and Pacific Regions

**AGENDA ITEM 4**

**CNS/ATM IMPLEMENTATION  
ACTIVITIES**

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEM 4: CNS/ATM IMPLEMENTATION ACTIVITIES**

**Moderator: Ms. Nancy Graham**  
**Director, Asia Pacific International Area Office, APC-1**  
**Federal Aviation Administration**

**4.1** Ten (10) Discussion Papers and eleven (11) Information Papers were received and the following nine (9) Discussion Papers were presented under this agenda item:

<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
<b>AGENDA ITEM 4</b>	<b>CNS/ATM IMPLEMENTATION ACTIVITIES</b>	
DP/4/1	Regional Co-Operation For Deploying GNSS Navigation	Australia
DP/4/2	CNS/ATM Implementation Activities in Nepal	Nepal
DP/4/3	Preparation for the World Radiocommunication Conference (WRC-2007)	ICAO
DP/4/7	Future Spectrum Needs and Proposed WRC-2007 Actions	United States of America
DP/4/12	Optimising Regional and Sub-regional Collaboration On CNS/ATM Implementation: The Indonesian Automatic Dependant Surveillance – Broadcast (ADS-B) Regional Trial A Template for Collaboration on CNS/ATM Implementation in the Asia Pacific	Indonesia
DP/4/15	Asia Pacific Economic Cooperation (APEC) GNSS Implementation Team	Japan
DP/4/17	GNSS Activities in Indonesia	Indonesia
DP/4/18	Preliminary Performance Analysis of the Asia-Pacific Global Navigation Satellite System Test Bed	Thailand
DP/4/21	The SESAR Programme Deliverable Document D1: The Air Transport Framework - the Current Situation	France

**4.2 DP/4/1 Regional Co-Operation for Deploying GNSS Navigation**

4.2.1 This paper was presented by Australia. The paper reviewed some key challenges faced by the industry, and suggested new ways of developing and deploying CNS/ATM infrastructure. A prudent approach would minimise risks, and could establish a platform for greater efficiencies while maintaining sovereign control and establishing a precedent for other regions to follow.

4.2.2 Global Navigation Satellite Systems (GNSS) will have an increasing impact on the aviation business, particularly in navigation and surveillance technology. GNSS provides an opportunity to test some of the proposed models that invoke minimal risk. Members are encouraged to review how collaboration may provide greater benefits to their industry and to the industry as a whole as the transition to GNSS occurs. Examples of Ground Based Augmentation Systems (GBAS), Ground-based Regional Augmentation Systems (GRAS) and Automatic Dependent Surveillance Broadcast (ADS-B) were discussed as a way to test alternative business models for the development and deployment of new infrastructure.

4.2.3 The paper presented examples of business models which could be adopted to take advantage of the current challenges that face the region. The partnership between Airservices Australia and SITA separates asset ownership and asset operation. Another business model is collaboration between buying groups, which could be established to minimise acquisition costs. A limited example of this was the APEC GNSS test bed, where a number of states have closely collaborated to deploy the test bed and share the resulting data. The Directors General were encouraged to review their upgrade plans and consider the options for collaboration with neighbouring States; as well as, alternative business models to procuring infrastructure via tender.

#### **4.3 DP/4/2 CNS/ATM Implementation in Nepal**

4.3.1 Nepal presented a discussion paper that provided an update on the status of CNS/ATM implementation activities in Nepal. It outlined the implementation scenario and the progress made in the recent years. The paper called for extending co-operation and support for the implementation of CNS/ATM system particularly in the areas of human resource development, technology transfer and quality training to operational and technical manpower.

#### **4.4 DP/4/3 Preparation for the World Radiocommunication Conference (WRC-2007)**

4.4.1 The ICAO Secretariat presented a discussion paper on the preparation for World Radiocommunication Conference (WRC-2007). The Conference was informed that the Third Asia-Pacific Telecommunity (APT) Meeting (APG 2007-3) was held in Malaysia in February 2006. The ICAO Position for WRC-2007 as approved by the Council was presented to the meeting. In addition, ICAO announced plans for the future use of the frequency band 5 000-5 150 MHz. The Fourth APG Meeting (APG 2007-4) is scheduled to be held in Bangkok from 8 to 12 January 2007 and is expected to further update the APT Preliminary Views on WRC-2007 Agenda Items. The APT position will be finalized at the Fifth meeting to be held in July 2007 in Republic of Korea.

4.4.2 The Conference was further informed that the Second ICAO Regional Preparatory Group (RPG) Meeting for WRC-2007 will be held in Bangkok from 15 to 17 January 2007 (in conjunction with the APT APG 2007-4) to provide support to States to finalize their proposals to be submitted to the final meeting of APT APG 2007-5. States were strongly encouraged to make arrangements for their nominated focal contact points responsible for preparation for WRC-2007 to participate in the meeting. The Directors General were urged to accord high priority to ensuring support by their States to the ICAO Position at the APT meetings as well as at the WRC 2007.

#### **4.5 DP/4/7 Future Spectrum Needs and Proposed WRC-2007 Actions**

4.5.1 The paper, which was presented by the United States, highlighted the future spectrum needs and identified several relevant agenda items of WRC-2007 which were of critical

concern to civil aviation. A general framework for future preparations for WRC-2007 was outlined. The United States submitted that international civil aviation should ensure that upgrading of other services is made in such a manner that current and future aeronautical operations in the relevant bands are fully protected. The paper informed the Conference of the need of additional spectrum allocations that will support the modernization of civil aviation telecommunication systems. It was advised that among other things, Agenda Item 1.6 for WRC 2007, was studying the potential spectrum for Airport Network and Location Equipment (ANLE) aeronautical fixed links in the 5091-5150 MHz band and allocations for new technologies to support aeronautical mobile communications requirements in other bands such as the 960-1024 MHz band. Some of the new spectrum allocations could be used to provide enhanced ATC communications services or to begin to provide spectrum to support the command and control communications links for unmanned aircraft operations.

4.5.2 In view of the importance of a coordinated strong aviation position, the Conference was invited to urge States to participate in the Second Regional Preparatory Group (RPG) Meeting for WRC-2007 in Bangkok, Thailand 15-17 January 2007.

**4.6 DP/4/12 Optimizing Regional and Sub-regional Collaboration on CNS/ATM Implementation: The Indonesian Automatic Dependant Surveillance – Broadcast (ADS-B) Regional Trial A Template for Collaboration on CNS/ATM Implementation in the Asia Pacific**

4.6.1 This paper presented by Indonesia provided information on the regional and sub-regional collaboration in the CNS/ATM implementation. The paper outlined an Indonesian initiative to demonstrate the sharing of ADS-B surveillance data across FIR boundaries in the Asia Pacific region. It was recognized that ADS-B was an electronic surveillance option where radar was unaffordable and provided key infrastructure for the delivery of flex tracks. ADS-B implementation would increase airspace capacity and would support utilization of reduced separation minima due to improved conformance monitoring.

4.6.2 In considering these advantages, the Indonesian DGCA decided in June 2005 to form a joint ADS-B project team, using existing ADS-B expertise and conduct a regional trial of ADS-B. To demonstrate cross-FIR electronic surveillance data sharing and promote regional co-operation during the trial, ADS-B data from the Natuna Island installation were made available to CAA Singapore and data from Kupang and Bali were be shared with Brisbane ACC in Australia. SITA and Airservices Australia monitored the performance of the communication network used for the trial from their monitoring centres in Singapore and Brisbane respectively. For demonstration and promotional purposes, DGCA agreed that real time trial surveillance data from the three ground sites would be networked to a display in the ICAO Regional Office, Bangkok.

4.6.3 The trial has involved collaboration of key stakeholders and demonstrated that with the collaboration between neighbouring States and the participation of appropriate partners from aviation industry a great potential existed to accelerate the deployment of CNS/ATM infrastructure and improve regional airspace safety and efficiency. Also, as acquisition model, compared to single equipment purchase, the trial showed some advantages for the ANSPs in terms of capital cost sharing, reducing risk and timely service deployment.

**4.7 DP/4/15 Asia Pacific Economic Cooperation (APEC) GNSS Implementation Team**

4.7.1 Japan presented this paper which informed the Conference about the GNSS implementation related activities of the Asia Pacific Economic Cooperation (APEC) GNSS Implementation Team (GIT) established by the APEC Transportation Working Group (TPT-WG) in 2002. The Conference was informed that the GIT meetings had strong presence from the aviation sector and very limited participation from other transport sectors, such as maritime and land transport. Nevertheless, the GIT promoted the use of GNSS by all transport modes. GIT served as a good forum for discussing GNSS with the participation of the European Union (EU) and India which expanded the scope of the group to cover also the European Geostationary Navigation Overlay Service (EGNOS) and Galileo System being implemented in Europe and the GPS-Aided GEO Augmented Navigation (GAGAN) system being implemented by India. These systems developed outside the region were expected to contribute to implementation of GNSS in the Asia Pacific region. The participants were invited to visit APEC GIT website.

**4.8 DP/4/17 GNSS Activities in Indonesia**

4.8.1 Indonesia presented a discussion paper on the Global Navigation Satellite System (GNSS) activities in Indonesia. GNSS has been used as primary means for en-route and secondary for terminal and Non Precision Approach (NPA). The implementation of GNSS in Indonesia dated back to 1995 when the Ministry Decree No. 35 enabled the use of GPS receiver as supplemental navigation means on board. A further step was the issuance of AIC No. 03 dated 15 April 2004 (Implementation of GNSS in Indonesian FIR). To allow the use of GNSS, the waypoints and important points (navaids, restricted area boundary, etc.) were measured or transformed in WGS-84. The GNSS based NPA Instrument Flight Procedure (IFP) overlaid with VOR/DME had been designed for 36 airports. For several airports where no navigation aids were available, the GNSS - IFP had been designed and tested with satisfying result. Recently, the DGCA Indonesia has participated in the GNSS testbed program in partnership with the APEC GNSS Implementation Team funded by the US TDA.

4.8.2 The Conference was informed that successful implementation of GNSS as navigation aids was strongly dependent on the readiness of the ATS provider and airline operators. Detailed planning and development of clear procedures were extremely important. The major problem identified for GNSS implementation in Indonesia was how to convince both air traffic controllers and pilots to utilize the GNSS-based navigation along with the conventional navigation means. Another difficulty experienced was the installation of GNSS receiver on the leased aircraft.

**4.9 DP/4/18 Preliminary Performance Analysis of the Asia-Pacific Global Navigation Satellite System Test Bed**

4.9.1 The paper presented by Thailand provided information about the Asia-Pacific GNSS Test Bed which is a regional collaboration program that brings together experts in satellite navigation within the Asia-Pacific to study the performance of the Global Navigation Satellite System (GNSS) and to develop a regional plan that will lead to a successful implementation of GNSS in the region. This initiative is a work program under the APEC GNSS Implementation Team (APEC GIT), the program receives a supporting grant from the United States Trade and Development Agency (USTDA), on which Thailand, through Aeronautical Radio of Thailand (AEROTHAI), acts as the Grantee. Currently, seven Asia-Pacific Economies participate in the Test Bed program namely, Australia, Chinese Taipei, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. The Test Bed was commissioned in May 2006.

4.9.2 The objectives of the Asia-Pacific GNSS Test Bed program include: evaluation of the GNSS augmentation capability in the Asia-Pacific region; collecting empirical GNSS data and analyzing Equatorial atmospheric effects on GNSS performance; attaining a hand-on working experiences with GNSS equipment; refining and validating the GNSS performance over the FIRs of the participating Economies; and establishing a stage for regional research collaboration for the Asia-Pacific region. The paper provided further details on the system architecture and results of the preliminary performance analysis. The Conference was invited to encourage participation of States in the Test Bed programme.

**4.10 DP/4/21 The SESAR Programme Deliverable Document D1: The Air Transport Framework - The Current Situation**

4.10.1 This paper, which was presented by France, informed the Conference about the SESAR programme which is a European initiative to modernize the Air Traffic Management. It was explained that SESAR will combine technological, economic and regulatory aspects and will use the Single European Sky (SES) legislation to synchronise the plans and actions of the different stakeholders and federate resources for the development and implementation of the required improvements throughout Europe, in both airborne and ground systems.

4.10.2 The Conference was invited to note that the first phase of SESAR, the Definition Phase, consists of a 2-year study awarded to an industry wide consortium. The DSNA, which is a service of the French DGAC, in charge of the provision of air navigation services, is a member of the consortium. The Definition Phase will ultimately deliver a European ATM Master Plan covering the period up to 2020 and 6 main deliverables will be produced over the 2 years covering all aspects of the future ATM System. The first deliverable, D1, is dedicated to the current situation of the air transport framework. It was released at the end of July 2006. The paper presented by France provided an overview of the document and the Conference was invited to examine the full report which can be obtained on the Eurocontrol web site.

4.10.3 The Conference was invited to take note of the progress of the SESAR programme, and to express its support to the presented recommendations, in particular those which should have a global impact, not limited to the Europe region of ICAO.

**4.11 Discussions on Papers Presented**

4.11.1 The Moderator drew attention to the rapid growth in air traffic which is occurring in the Asia and Pacific regions and urged the Conference to consider the requirement for strong, determined, coordinated action to address the many challenges in catering for this growth. The Moderator particularly invited the Conference to focus on two questions. The first was “as a community, what more should we be doing to adopt proven, new technologies to address the challenges posed by growth in traffic?” The second was “what new mechanisms will be required in order to address the performance of the air navigation systems?”

4.11.2 Commenting on DP/4/1, DP/4/15, DP/4/17 and DP/4/18, which were taken together, the Moderator observed that Australia addressed regional solutions for deploying GNSS navigation, and Japan continued this theme by drawing attention to the work being conducted by the Asia Pacific Economic Cooperation (APEC) GNSS Implementation Team. Indonesia provided a status report on GNSS implementation in Indonesia and shared its experiences, while Thailand reported on work in progress with its paper on “Preliminary Performance Analysis of the Asia-Pacific Global Navigation Satellite System Test Bed”. The Moderator observed that these papers

provided evidence of implementation activities and, recalling the questions posed at the commencement of the discussion session, again asked “what more should we be doing?”

4.11.3 Australia, in commenting on DP/4/2, made general observations relevant to all of the papers presented under this Agenda Item. Australia observed that the paper by Nepal illustrated a common challenge of how to introduce new technologies and systems efficiently and effectively. Australia shared its experiences when it introduced a new and advanced air navigation system in the 1990s. A key lesson learned was that, while it is natural to focus on the equipment, successful implementation requires attention to consultation and human factors. It was realized that there is a wealth of knowledge in the organization and that the views of the line staff about operational needs are a valuable input to ensure successful outcomes. Attention also needs to be given to developing procedures and manuals while working closely with airlines to understand how they operate now and in the future. Australia also recognizes the importance of working cooperatively on a regional basis with sharing of information.

4.11.4 Singapore commented on DP/4/3 and DP/4/7 and expressed its strong support for both papers addressing preparations for the World Radiocommunication Conference (WRC) in 2007 and of the need to preserve the spectrum available for aviation communications. IATA also supported both papers and emphasized the importance of the matter under discussion. IATA noted the need to ensure civil aviation’s needs are well understood and stressed on the participation in the APT preparatory meetings. IATA saw a need for “stakeholder management” to ensure that the civil aviation needs are defended in the strongest possible terms.

4.11.5 Also commenting on DP/4/3 and DP/4/7, ICAO considered that this is an important area deserving of an Action Item to remind States about the WRC-2007. The value of having focal points in each State and the work carried out by the ICAO Regional Preparatory Group (RPG) are vital inputs preparing for the Asia-Pacific Telecommunity (APT) and the preparation of a regional position for WRC-2007.

4.11.6 Several delegates thanked Indonesia for sharing its experience regarding the regional trial of Automatic Dependant Surveillance – Broadcast (ADS-B) and for its leadership in presenting a Template for Collaboration on CNS/ATM Implementation in Asia and Pacific. Singapore indicated that it would be pleased to participate in the ADS-B trial. Australia appreciated the efforts to achieve real-time sharing of information with neighbouring States. IATA also thanked Indonesia for proceeding with its trial and also drew attention to paragraph 8.1 (b) in the paper inviting actions by the Conference, namely to *encourage States to consider the establishment of cross-border (FIR) electronic surveillance arrangements*. IATA emphasized the value of cross-border sharing of surveillance data and hoped that this will become a practice elsewhere. Noting that some issues were yet to be resolved, for example, transponders certification, IATA was also looking forward to the development of global solutions. CANSO commended Indonesia on paper DP/4/12 and considered that it was a major step forward. CANSO explained that it advocates this type of regional cooperation.

4.11.7 The United States thanked France for its presentation of DP/4/21. Attention was drawn to forecasted huge traffic growth by 2015, with expected 1 billion passengers in combination with the introduction of new commercial aircraft and doubling or tripling of business aircraft. The United States observed that regulatory bodies and air navigation service providers face a challenge in keeping up with this growth. The Conference was informed that the Federal Aviation Administration recently completed a study that predicted unacceptable level of delays in 2015 working with today’s air traffic management systems. Against this background, the United States had described its vision for the next generation of air navigation in IP/3/8 – “Next Generation Air Transportation System (NGATS)”. The United States considered that a common goal is to seek continuous improvement in safety and it drew attention to the importance placed on human factors. The United States also noted the focus of SESAR on longer term planning, but the

Conference was urged not to overlook shorter term improvements resulting from implementation of ADS-B, RNP, etc. From ATFM perspective the focus should be on ensuring interoperability of the future systems like SESAR and NGATS. The United States also made reference to the Worldwide Symposium on Performance of the Air Navigation System to be held in Montreal in March 2007 and the guidance this activity is intended to support continuous improvement in the capability of the air navigation system.

4.11.8 ICAO drew attention to the sizeable funding requirements in order to implement the required systems as documented in DP/4/21. Noting the need for global harmonization of current and future air navigation systems ICAO considered inviting France and the United States to provide information about SESAR and NGATS, respectively, to the relevant APANPIRG sub-groups to assist them in their regional planning work. The Conference supported sharing of information and expressed interest in discussing this material at the 44<sup>th</sup> Conference.

4.11.9 Also commenting on DP/4/21, IATA noted that the current problems with air traffic congestion in Europe and the United States of America illustrate what could happen in some parts of Asia and Pacific and IATA therefore urged the Conference to give consideration to the lessons learned. IATA also highlighted the Worldwide Symposium on Performance of the Air Navigation System to be held in Montreal in March 2007 which will focus attention on realizing performance improvements and further measures to cope with growth. IATA considered that there are many lessons that the Asia and Pacific regions can draw from SESAR, particularly with the significant growth occurring in the region.

#### **4.12 Summation by the Moderator**

4.12.1 The Moderator reminded the Conference about the salient points covered in each of the papers covered during the session and particularly thanked the presenters for sharing their knowledge and experiences. Reflecting on the material discussed, the Moderator saw evidence of considerable progress in different spheres. First, there is a significant amount of activity under way to implement ADS-B on a national and a regional basis in addition to on-going work on GNSS projects. Decisions whether to proceed with full implementation following trials will be required. The Moderator also noted the amount of work to derive benefits from initiatives such as RVSM. The Conference was invited to consider that there are other tools to address the needs of Asia and Pacific that were not discussed and the Moderator also highlighted the need to begin serious planning for the next generation was identified. The Moderator also drew attention to the wishes expressed by the Conference that an Action Item be adopted to remind States about the WRC-2007.

4.12.2 The Moderator noted that the presentations indicated that Asia and Pacific is heavily committed to implementation, but observed that we are reaching a point where some major decisions need to be made. The tremendous amount of cooperation will prove to be beneficial in this context, particularly considering that many of the problems that need to be addressed transcend national boundaries and will continue to do so.

43<sup>rd</sup> Conference of Directors General of Civil Aviation  
Asia and Pacific Regions

**AGENDA ITEM 5**

**AVIATION SAFETY**

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEM 5: AVIATION SAFETY**

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

**5.1** Twelve (12) Discussion Papers and twenty-three (23) Information Papers were received under this agenda item and the following ten (10) papers were presented:

REF.	TITLE	PRESENTED BY
<b>AGENDA ITEM 5</b>	<b>AVIATION SAFETY</b>	
DP/5/2	ICAO Annex 1 Language Proficiency Requirements	ICAO
DP/5/3	Safety Management Systems Implementation in Asia and Pacific Regions - A Progress Report	ICAO
DP/5/4	Progress Report on Regional Cooperation on Accident Investigation	ICAO
DP/5/5	Provision of Safety Monitoring Services in Asia and Pacific	ICAO
DP/5/9	Safety Case Concept: Beyond SMS	Australia
DP/5/10	A Proposal to Modernise and Harmonise Rules for the Maintenance of Australian Aircraft and Licensing of Australian Aircraft Maintenance Personnel	Australia
DP/5/12	Investigation Analysis Methodology	Australia
DP/5/25	Regional Cooperation on Accident Investigation	Republic of Korea
DP/5/29	Collaboration between States to be Ready to Face a Major Investigation	France
DP/5/35	English Language Proficiency Requirements	Republic of Korea

**5.2 DP/5/2 ICAO Annex 1 Language Proficiency Requirements**

5.2.1 In this paper presented by ICAO the Conference's attention was drawn to Amendment 164 to Annex 1 – Personnel Licensing. The Conference was reminded that this contained language proficiency requirements that, as of 5 March 2008 pilots and air traffic controllers shall demonstrate the ability to speak and understand the language used for radiotelephony communications to the level specified in the language proficiency requirements of ICAO documentation.

5.2.2 ICAO also informed the Conference about the findings of the Air Navigation Commission's review of progress on the implementation of the new language proficiency requirements. This was based on a global survey of the status of implementation which was conducted in early 2006 through all ICAO Regional Offices. In particular, the Conference was informed that the Commission agreed that the applicability date of 5 March 2008 be retained and that Contracting States should take the necessary measures to implement the language proficiency requirements in a timely manner.

5.2.3 ICAO also referred to its State Letter sent on 27 October 2006 which conveyed a questionnaire concerning implementation of language proficiency requirements. The data collected through the questionnaire is intended to be reviewed during the 174th Session of the Commission in early 2007. ICAO therefore urged the Conference to complete and return the questionnaire by 15 January 2007. ICAO also encouraged States and other stakeholders to attend the Second International Aviation Language Symposium which will be conducted from 7 to 9 May 2007.

### **5.3 DP/5/3 Safety Management Systems Implementation in Asia and Pacific Regions - A Progress Report**

5.3.1 This paper was presented by the ICAO Secretariat. Following the 42nd DGCA conference which laid down a package of measures for a project on implementation of safety management systems in the region, this paper is the first progress report on the agreed principles concerning ICAO SMS requirements.

5.3.2 The 35th Session of the ICAO assembly (October 2004) formulated a resolution which resolves the States shall undertake certification of aerodromes and should ensure that safety management systems are introduced at their airports. Amendments to the various annexes (6, 11 and 14) to harmonize the requirements related to the safety management have been adopted by the Council. The ICAO Safety Management Manual (Doc 9859) is intended to serve as a unified source of safety management information.

5.3.3 To assist States in fulfilling the requirements of safety management system Regional workshops had been organized with the assistance from States in all ICAO Regions. More ICAO courses are planned for early 2007. The Secretary General's letter AN 12/46-06/52 dated 30 June 2006 provided details of the training course on "Implementation of Safety Management Systems" for officials from the Civil Aviation Administration.

### **5.4 DP/5/4 Progress Report on Regional Cooperation on Accident Investigation**

5.4.1 In this paper presented by ICAO, the Conference was informed about the outcomes of Action Item 42/7 arising from its 42nd Conference in 2005 when it strongly urged States to continue to provide support to the ICAO Asia/Pacific Regional Office in facilitating Accident Investigation Workshops on a yearly basis. ICAO reported that the first of what is hoped to become a series of workshops for accident investigators for the Asia and Pacific regions was generously hosted by the Aviation and Railway Accident Investigation Board of the Republic of Korea. The Conference was informed that 34 participants from 11 States/Administrations attended the workshop with presentations given by five of the attending States, and by ICAO and COSCAP-North Asia. A report of the workshop was provided in the paper prepared by ICAO. The Conference was advised that Hong Kong, China undertook to host the next workshop in September/October 2007 and the Conference was urged to encourage great participation in this activity.

5.4.2 Action Item 42/7 also urged States to support the development of a database of accident investigation resources within the Asia/Pacific Region by providing a list of accident investigation resources within their respective States that can be shared with other States. ICAO reported that progress had been made on the data base of Regional Capabilities but only a limited number of States had responded to the request for information. In order that a true picture of the resources available in the Asia Pacific Region is gained and maintained it will be necessary to re-circulate the resources questionnaire and the Conference was urged to request that the States/Administrations complete and return the survey instrument.

5.4.3 The Conference's attention was drawn to a suggestion that regional cooperation efforts in regard to accident/incident investigation could be promoted via the COSCAP projects in South Asia, South East Asia and North Asia. ICAO informed the Conference that use has already been made by these projects of the outreach programme of the International Society of Air Safety Investigators (ISASI) in providing some educational courses. Two more courses are planned in 2007 for COSCAP- South Asia. ICAO considered that some coordination of these activities could be fruitful and invited the Conference to consider whether the COSCAP projects represent an appropriate forum for further development of regional cooperation in accident/investigation.

## **5.5 DP/5/5 Provision of Safety Monitoring Services in Asia and Pacific**

5.5.1 In this paper presented by the ICAO Secretariat it was noted that the matter of organizing and funding safety monitoring services had been discussed at previous Conferences of the Directors General of Civil Aviation in Asia and Pacific and the importance attached to the subject was given expression in Action Items 41/6 and 42/4 adopted at the two most recent Conferences. Parallel to this, the Council of ICAO had been considering difficulties in establishing sustainable approaches to funding safety monitoring activities in other ICAO Regions. The matter had been referred to ALLPIRG/6 and the Air Navigation Services Economics Panel (ANSEP/6) prior to the Council adopting guidance material for a globally applicable approach.

5.5.2 ICAO explained the details of this approach including a step-by-step procedure for implementation. APANPIRG's Regional Airspace Safety Monitoring Advisory Group (RASMAG) considered the global experiences and particularly noted the finding that voluntary funding approaches which are currently relied upon in Asia and Pacific regions are not sustainable. ICAO informed the Conference that RASMAG/5 had urged APANPIRG to consider adoption of the global model formulated by ICAO to ensure that States have the option of an equitable, effective, harmonized and technical regional capability to meet all of the safety requirements for future regional airspace planning, including the implementation and operation of reduced separation minima (including horizontal), communications, navigation, surveillance and air traffic management (CNS/ATM) systems and related airspace changes.

5.5.3 In considering the application of this guidance in the Asia and Pacific Regions, APANPIRG/17 in August 2006 drew attention to complex matters that would need to be resolved, specifically in relation to matters of legal liability. APANPIRG/17 considered that appropriate organizational documentation, terms of reference and related materials would need to be drafted before it could be reasonably expected that States would commit to the approach. APANPIRG/17 felt that this would require careful and focused consideration and the meeting agreed that the most appropriate mechanism in this respect was to constitute a task force to study the issues and develop appropriate documentation and implementation plans. Noting the concern expressed by RASMAG about the slow progress that had been achieved on this matter, ICAO invited the Conference to urge those administrations involved in the task force to commit appropriately empowered experts to develop the necessary materials and information required to implement the guidance recommended by the Council of ICAO. It was noted that the action proposed is time-bounded

considering that APANPIRG/17 requested that implementation proposals for the establishment of Regional Airspace Safety Monitoring Committees be developed and distributed to States by 30 June 2007.

**5.6 DP/5/9 Safety Case Concept: Beyond SMS**

5.6.1 The paper was presented by a representative of Australia. It advised that the Civil Aviation Safety Authority of Australia (CASA) is considering adoption of a "safety case concept" which would enable operators to more effectively manage safety risks in individual operations. The Safety Case concept builds on the widely promoted Safety Management System (SMS) and exposition concepts. In 2002 CASA adopted a policy of requiring operators to have a safety management system (SMS) in place to enable them to manage their own safety risks.

5.6.2 The Safety Case approach is considered world's best practice in an outcome based regulatory system and is now being used increasingly worldwide. CASA is in the process of moving towards a goal based, or outcome based, regulatory system, using a model based on the European Aviation Safety Agency's (EASA's) regulatory framework.

5.6.3 Adoption of a Safety Case concept will enable all operators to make a further advance in managing their risks to achieve safe operation in the same way SMS does and is a further step towards improved safety. The Safety Case concept has the potential to provide significant safety benefits beyond current approaches while building on those approaches. It transfers the onus for safe operation from the regulator to the aviation industry. Importantly it will work for smaller, and more "at risk" operators.

**5.7 DP/5/10 A Proposal to Modernise and Harmonise Rules for the Maintenance of Australian Aircraft and Licensing of Australian Aircraft Maintenance Personnel**

5.7.1 This paper presented by Australia outlined a major project undertaken by the Civil Aviation Safety Authority of Australia (CASA) to modernise and harmonise its rules for the maintenance of Australian aircraft and the licensing of Australian aircraft maintenance personnel. An important feature of the project is the use of a joint CASA/industry team, which allows for an open, transparent and honest exchange of ideas and views.

5.7.2 A decision was made by CASA to adopt the European model of aviation safety regulations, which are set out as outcome based rules rather than the older, prescriptive type of regulation currently in use in Australia.

5.7.3 In deciding how it will achieve the desired outcome of the regulations industry has two broad options - either to consider and use a published Acceptable Means of Compliance (AMC) or to decide on another approach which suits their specific environment and business needs. The AMCs are cross-referenced to a specific regulation so there is direct connection between them. Therefore the AMCs are one way of understanding the how of the requirements but they are advisory and not binding on the industry.

5.7.4 If an industry organisation wishes to use a differing method of achieving the required outcome then it will develop this method, write it up and provide it to CASA for consideration and approval. The mechanism to inform CASA of this is called an "exposition". A significant outcome of an outcomes-based regulatory model and exposition scheme is to move primary responsibility for safety outcomes from the regulator to industry organisations.

5.7.5 Harmonisation of Australia's regulatory requirements for maintenance organisations and maintenance training organisations with a major overseas system will allow such Australian organisations to compete for business internationally with a well recognised certification basis. Further details on the project are available on CASA's website.

**5.8 DP/5/12 Investigation Analysis Methodology**

5.8.1 This paper was presented by a representative of Australia. It reported that the analysis component of a safety investigation is critically important for determining whether an investigation's findings are respected and ultimately successful in enhancing safety. Despite its importance and complexity, analysis has been a neglected area in terms of standards, guidance and training of investigators in most air safety investigation organisations. Most manuals on aircraft accident investigation contain little material relating to analysis activities, including the ICAO Manual of Aircraft Accident Investigation

5.8.2 To help address this situation within its own organisation, the Australian Transport Safety Bureau (ATSB) developed and introduced a comprehensive framework to guide and support the analysis activities of its investigators, which could have wider application throughout the region and via ICAO. The ultimate aims of this framework were to improve the rigour, consistency and defensibility of investigation analysis activities, and improve the ability of investigators to detect safety issues in the transportation system.

**5.9 DP/5/25 Regional Cooperation on Accident Investigation**

5.9.1 This paper was presented by a representative of the Republic of Korea. The Korean Aviation and Railway Accident Investigation Board (ARAIB) expressed its satisfaction in hosting the first Asia and Pacific Regional Accident Investigation Workshop in Seoul 20-21 September 2006 in response to Action Item 42/7 arising from the 42nd DGCA conference held in September 2005. The Conference was advised that the workshop was a great success and the Republic of Korea conveyed its sincere appreciation to those Administrations who contributed to this outcome. The Republic of Korea informed the Conference that it had taken full advantage of being the host and permitted its maximum participation and afforded its officials with opportunities to meet with counterparts and experts from other States.

5.9.2 Reference also was made to the database on accident investigation resources called for under Action Item 42/7, and the Republic of Korea encouraged all States/Administrations to submit requested information even if they have no accident investigation board or resources. The Republic of Korea highlighted the value to all States in having a comprehensive picture about resource capabilities as a basis for sharing and cooperation.

**5.10 DP/5/29 Collaboration Between States to be Ready to Face a Major Investigation**

5.10.1 A representative from France explained that structured and comprehensive accident investigations are essential for aviation safety. Assistance provided by an investigative body with significant resources to an organization, or State, with more limited means is sometimes essential and can take many forms. Co-operation during an investigation is provided for in Annex 13, but it may be reinforced by a detailed written agreement between Parties. Based on the example of what has been done between ECAC Member States, the paper offered a proposal for Co-operation in the Field of Civil Aviation Accident and Incident Investigations to be discussed between APAC States.

**5.11 DP/5/35 English Language Proficiency Requirements**

5.11.1 This paper was presented by the Republic of Korea on behalf of the Montreal Group of Asia/Pacific Council Representatives. The Conference's attention was drawn to Amendment 164 to Annex I – Personnel Licencing concerning language proficiency requirements. The Conference was invited to recall the survey on the status of implementation which was circulated to all ICAO regions requesting responses by 30 March 2006. The Conference was informed that only 19% of ICAO's 189 Contracting States responded to the survey, including only 12 from the Asia and Pacific regions. Of the 36 responses, ten were from States where English is the first language.

5.11.2 Findings from the survey were presented, but it was emphasized that the Air Navigation Commission (ANC) did not have sufficient information from this survey to recommend a change to the implementation date of the Standard. The ANC has therefore requested that States be reminded to take the necessary measures to implement the language proficiency requirements in a timely manner. The ANC also requested the Secretariat to provide an updated status of implementation of the language proficiency requirements by States in early 2007. Accordingly, the Montreal Group is strongly urging States to respond to the second survey on this matter by 15 January 2007. Attention also was drawn to ICAO's Second Aviation Language Symposium from 7 to 9 May 2007 at its headquarters in Montreal. States/Administrations also were invited to consider establishing a focal point to direct enquiries concerning other aviation-related training opportunities as well as to facilitate the sharing of information on industry best practices.

**5.12 Discussion on Papers Presented**

5.12.1 In commenting on DP/5/9, Vanuatu advised that it requires its airline operators to have their own safety management systems. Vanuatu shared its experience that the airlines did not have a complete understanding of what was required and why it was needed when the programme first commenced, but the ICAO audits played an important role in raising the level of understanding. Vanuatu's airlines now are convinced about the benefits and are committed to SMS. The national airline of Vanuatu also will undergo an IOSA in first part of 2007. Implementation of SMS for small States like Vanuatu is a big challenge, but despite this it is possible to put the necessary actions into place and derive significant benefits. Vanuatu took note of the courses on SMS training as discussed in DP/5/3 and indicated its strong interest in participating in the future.

5.12.2 Singapore thanked Australia for sharing its concept of "safety cases" in DP/5/9 and for explaining how this goes beyond SMS. Singapore supported this outcomes-based approach to regulation and agreed that this provided the means to show that the intent of regulation is being realized. Singapore encourages all of the aviation industry to implement SMS and it had provided details about its approach in IP/5/33 – "Implementing An Integrated Safety Management System in Singapore". Although Singapore has not put the safety case concept into practice in a formal way, it had pursued the approach in practical applications.

5.12.3 Hong Kong, China commented on DP/5/3 and supported the initiatives of the ICAO Regional Office to develop SMS training packages. The Conference's attention was drawn to the plan to host a regional SMS seminar in Hong Kong, China in the second half of 2007. Invitations will be issued to the States once a date has been finalized.

5.12.4 ICAO explained that the thrust of DP/5/3 was on the implementation of SMS on a project-based approach with targets and some form of checking on implementation and reporting. ICAO observed that there was a great deal of interest in SMS and that this was generating various activities. ICAO noted an emerging need to coordinate this work and this was an area requiring further consideration. Commenting on DP/5/9 ICAO noted the heavy responsibility placed on industry by SMS and that the approach discussed in DP/5/9 was very much in line with the ICAO model of SMS.

5.12.5 The observer from IBAC congratulated Australia on the work reported in DP/5/9 and described it as a “modern” approach to regulation of aviation safety. IBAC explained that it had promoted this concept for several years as a performance-based approach to regulation. Notwithstanding the benefits, IBAC noted the many difficulties this would pose for regulators. IBAC also raised a question whether Australia would accept inputs from industry-accredited organizations in building a safety case. Australia responded that it would look favourably at other audit processes that could be encompassed within the safety oversight process. It was added that Australia already is looking at the IOSA to see how that would complement the approach.

5.12.6 China also referred to DP/5/3 and informed the Conference that it has been implementing SMS, although it had encountered many practical problems. China also referred to its IP/5/14 – “Implementation of the Safety Management System in China” – wherein additional information was shared with the Conference about how SMS is being introduced in China. The China Civil Aviation Safety Institute was also conducting courses on SMS and this has enabled the training of more than 300 safety inspectors. China invited all States to take advantage of these courses, which could be conducted in both English and Chinese language courses. In addition, China explained its efforts to publicize SMS to the aviation industry.

5.12.7 Singapore also expressed support for the actions proposed in DP/5/5 and expressed the view that it is essential to have safety monitoring in place. Singapore agreed that it is important to share the costs of providing safety monitoring services equitably and to ensure that the arrangement is sustainable. Singapore advised the Conference that it is interested in providing safety management agency services whenever required, but also thanked Thailand for the service being provided.

5.12.8 The Moderator supported ICAO’s call for an Action Item along the lines indicated in the paper and drew the Conference’s attention to the attachment to DP/5/5 which provides information about the objectives, terms of reference and composition of the task force to be established.

5.12.9 Australia reiterated its support for the task force discussed in DP/5/5 and observed that the matter had been under discussion for a long time. Australia invited the Conference to note the importance of committing appropriately qualified and empowered staff to the task force rather than leaving it to technical specialists who were not familiar with the legal and financial matters that would need to be addressed.

5.12.10 The United States thanked ICAO for highlighting the contribution made by the Federal Aviation Agency to safety monitoring, but also drew attention to paragraph 2.4.4 contained in DP/5/5 and the risk that continued funding of its services is not guaranteed beyond June 2007. Japan thanked ICAO for the leadership it was providing in this matter and emphasized that Japan would fully participate in the task force. Noting the strong support for the actions proposed in DP/5/5, ICAO proposed that an appropriate Action Item be developed on the basis of paragraphs 3.1 (d) and (e) contained in DP/5/5.

5.12.11 In commenting on DP/5/2 the United States recognized the substantial advancements occurring in language proficiency and invited the Conference to note the excellent

contribution provided by the Singapore Aviation Academy. ICAO was asked whether any information could be provided about the Air Navigation Commission's deliberations on the recommendations put to it by the Airline Owners and Pilots Association for light, general aviation aircraft. ICAO agreed to seek information on the matter.

5.12.12 Singapore advised the Conference that it is on schedule for implementing the language proficiency requirements and, though it had replied to the earlier survey, it would also respond to the State Letter referred to in DP/5/2. Singapore also indicated that it would attend the Second International Aviation Language Symposium to be held in May, 2007. Australia referred to DP/5/35 and considered the actions called for to designate a regional focal point concerning implementation of English language proficiency. Australia believed that the appropriate option for this was the ICAO Regional Office and not the Asia Pacific Consultative Link. The Moderator also supported this view. Indonesia advised that it has included English language proficiency requirements into its approval for training organizations and also informed the Conference about implementation of the requirement in Indonesia.

5.12.13 Hong Kong, China informed the Conference that it had programmed 9 training courses on English language proficiency starting in January 2007 and that it is collaborating closely with service providers to ensure compliance in accordance with the measures described in DP/5/2. Thailand advised that it had developed new standardized training packages on English language proficiency and these would be shared with other States. Thailand informed the Conference that it already has run two courses and that it will offer another 6 in 2007.

5.12.14 In closing discussion on the papers on English language proficiency, the Moderator drew attention to the costs that would be incurred if the deadlines are not met. The Moderator urged all delegates to look more closely at language proficiency requirements and to keep the deadline in mind. States/Administrations also were urged to give priority to the questionnaire distributed by ICAO and to submit their responses before 15 January 2007. Attention was drawn as well to the Symposium to be held in Montreal in May 2007.

5.12.15 The Moderator observed that DP/5/10 provided another example of regulating safety by focusing on outcomes rather than being prescriptive. Singapore indicated that it is following the same path through its regulations covering aircraft maintenance licencing. Singapore informed the Conference that it is working closely with industry on training and conversion courses and it intends to publish a book on its new SAR regulations.

5.12.16 New Zealand congratulated Australia for the approach it is taking as described in DP/5/10 and informed the Conference that New Zealand had adopted a similar approach in 1992. The experience was that safety improved significantly as operators became aware of their responsibilities. New Zealand echoed Australia's observations that industry practices are changing rapidly and the challenges this poses for a safety regulator with declining resources must be addressed by finding better ways. Furthermore, New Zealand stressed the importance of working closely with industry in implementing changes in the way safety is regulated.

5.12.17 Malaysia took note of the Australian approach to licenced aircraft maintenance personnel and agreed with both Australia and New Zealand about the challenges posed by changing industry practices. However, the Conference was advised that Malaysia took a different view. Malaysia faces a shortage of line maintenance staff, but the mobility of skilled people is impeded because of the diversity of regulations. Accordingly, Malaysia supports the harmonization of rules, especially on the licencing of maintenance personnel and for maintenance and overhaul organizations.

5.12.18 Vanuatu commended Australia for taking this approach to modernize the rules on safety oversight. Vanuatu considers that this approach will help the Pacific area States to

harmonise rules. Vanuatu agreed that dynamic conditions in the industry were getting ahead of regulatory authorities and Vanuatu expressed its interest in working with Australia and New Zealand to implement a harmonized approach in the Pacific area. IATA concurred with DP/5/10 and congratulated Australia for pursuing what it described as a “win-win” approach. ICAO drew attention to the work carried out by the COSCAPs to assist in the harmonization of regulations and, noting the interest in this area, invited the States concerned to consider raising the priority of this work.

5.12.19 Turning to DP/5/4 and DP/5/25 the Moderator invited the Conference to consider the importance of having greater cooperation on accident investigation in view of the limited resources available and the scarce expertise. Hong Kong, China commented on DP/5/4 that, while it is important to provide essential training to give inspectors the required knowledge, it is also important to maintain competence. Accordingly, Hong Kong, China has provided a refresher training course for its inspectors and informed the Conference that Australia and New Zealand had participated. Hong Kong, China also confirmed that it would host a regional workshop on accident investigation in September/October 2007 and offered to share its knowledge and expertise in accident investigation.

5.12.20 The Moderator thanked Australia for its presentation of DP/5/12 and noted the importance of having sound legislation in place to support accident investigation. A delegate from Malaysia also thanked Australia for sharing information about its methodology for accident investigation, especially in the context where new aircraft are being introduced into the system.

5.12.21 The United States acknowledged the valuable contributions by all of the papers on accident investigations, but particularly highlighted DP/5/29 and especially its references to the need for cooperation. The United States shared its recent experiences in dealing with a crash over the mountains of Brazil and the importance in this context of having mutual understanding of protocols on the State of registry and the State of the operator.

### **5.13 Summation by the Moderator**

5.13.1 The Moderator reminded the Conference that the ten papers presented under this Agenda Item covered a wide range of safety matters including safety management systems, language proficiency, changing methodologies on safety oversight, and cooperation in accident investigation. Reflecting on this, the Moderator considered that the Conference had dealt with the licencing of safety critical areas, but that it had covered other elements relating to organizations. Notably, the Conference had considered how to organize and implement SMS and to apply SMS principles to the various sectors of the industry. The papers by Australia went beyond SMS and proposed an outcomes-based approach with “safety cases”.

5.13.2 The Moderator then considered the deliberations in a regional context and noted that throughout the discussions there was serious attention given to ways of enhancing regional cooperation. This included the work to be carried out under an APANPIRG task force to provide for sustainable and equitable approaches to funding safety monitoring services.

5.13.3 In closing the discussions on Agenda Item 5, the Moderator reminded the Conference about the importance of responding to the survey on language proficiency. The Moderator reflected that the initiatives under way would give the delegates a great deal to focus on over the next year and that there would be much to report upon at the 44th Conference.

43<sup>rd</sup> Conference of Directors General of Civil Aviation  
Asia and Pacific Regions

**AGENDA ITEM 6**

**AVIATION SECURITY**

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEM 6: AVIATION SECURITY**

**Moderator: M/Gen. Nilo C. Jatico**  
**Director General of Civil Aviation/Assistant Secretary**  
**Air Transportation Office, Philippines**

**6.1** Seven (7) Discussion Papers and eleven (11) Information Papers were received under this agenda item and the following six (6) Discussion Papers were presented:

<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
<b>AGENDA ITEM 6</b>	<b>AVIATION SECURITY</b>	
DP/6/1	Progress Report on the ICAO Universal Security Audit Programme	ICAO
DP/6/5	China's Experience on Managing Unruly Passengers	China
DP/6/11	Contracting MOU Regarding Deployment of In-Flight Security Officers (IFSOs)	Republic of Korea
DP/6/14	Best Practice Security Management System	Thailand
DP/6/15	Carriage of Liquid Duty Free Items by Transfer Passengers in View of Restrictions on Liquids and Gels in Hand Baggage	Singapore
DP/6/18	August 2006 Aviation Security Alert in the UK	United Kingdom

**6.2 DP/6/1 Progress Report on the ICAO Universal Security Audit Programme**

6.2.1 In this paper, ICAO informed the Conference about the progress made in the execution of the ICAO Universal Security Audit Programme (USAP), with special emphasis on audits and follow-up visits in the Asia and Pacific regions. ICAO also provided details about the evolution of USAP beyond 2007 and the administrative integration of the ICAO Universal Safety Oversight Audit Programme (USOAP) and the USAP. The Conference's attention was drawn to the USAP secure website and its value as a consolidated resource on the activities of the programme, including a listing of States audited to date, upcoming schedules, analysis of audit results, and other relevant documentation.

6.2.2 In discussing key audit findings, ICAO reported that States have placed high priority on security in the post September 11th aviation environment, and there is an ongoing worldwide effort by States to align their aviation security frameworks with new and continuing threats to civil aviation. Many States have committed increasing resources to aviation security measures, particularly in the acquisition of new security equipment and technology in support of enhanced aviation security controls. Notwithstanding this, ICAO advised the Conference that follow-up visits after the completion of audits revealed that there remain a small number of States that have made little or no progress in implementing the ICAO recommendations to correct the deficiencies identified through the audits. Noting that efforts are on-going to encourage and assist

these States to take responsible actions in a measured and timely manner, the Conference was invited to urge States to implement their action plans

**6.3 DP/6/5 China's Experience on Managing Unruly Passengers**

6.3.1 This paper, which was presented by China, focused attention on the management of unruly passengers. It was explained that there are four main types of unruly behaviour in China which threaten aviation security, namely: unlawful invasion and occupation of aircraft; passenger affrays on board aircraft; anti-social behaviour; and failure to abide by instructions by crew members. The Conference was informed about the measures taken in China to deal with such unruly behaviour. In particular, in March 2006 the Standing Committee of the National People's Congress issued the Law on Administrative Penalties for Public Security, which specified types of unruly behaviour and related penalties. In addition, the legislation defined the jurisdiction so that all incidents of unruly behaviour occurring within the territory of China or in an aircraft registered in China may be dealt with under the Law, except in those situations where such behaviour is governed by international conventions. Furthermore, the legislation covers acts of unruly behaviour at airports, including intentional provision of false information.

6.3.2 China has deployed in-flight security officers (IFSOs) and has strengthened its Airport Police Force capacity to deal with problems at airports. China informed the Conference that it also had mounted a public relations campaign to educate travelers. The Conference was invited to join China in urging ICAO to develop new legal instruments or modify the existing security conventions to regulate unruly passengers.

**6.4 DP/6/11 Contracting MOU Regarding Deployment of In-Flight Security Officers (IFSOs)**

6.4.1 This paper was presented by the Republic of Korea. The Conference's attention was drawn to the increased interest in implementation of armed In-Flight Security Officers (IFSOs) on board aircraft. The Conference was reminded that each Contracting State adopting carriage of weapons on board aircraft is required to implement specific measures in accordance with Annex 17 (4.7.4 and 4.7.5 of Amendment 11). It was explained that, in the absence of guidance on the proper procedures to implement these requirements, some States have been pursuing implementation of IFSOs by signing contracting Memorandum of Understanding (MoUs), or through mutual agreement (in writing or orally) pursuant to each State's regulations.

6.4.2 Against this background, the Republic of Korea informed the Conference that it has completed an MoU with one State and now is developing one with another State. Meanwhile, another measure that is being taken is to exchange written information for consultation with 3 days notice prior to flight departure. However to improve the efficiency and effectiveness of its administration, the Republic of Korea has prepared a template MoU which contains the essential contents and standard procedure of deploying IFSOs. This template was welcomed at the ICAO 18th AVSEC Panel Meeting (11-15 September 2006). The template also has been provided to ICAO with the invitation to include this material in ICAO Doc 8973 – Aviation Security Manual. The Conference was invited to take note of the template and to apply this resource as appropriate within Asia and Pacific regions.

**6.5 DP/6/14 Best Practice Security Management System**

6.5.1 This paper was presented by Thailand. The Conference was reminded about new and emerging threats to the security of civil aviation. In doing so, Thailand highlighted the

challenges in maintaining and enhancing safety and security while continuing to provide high levels of service to travelers. Thailand considered that the best way to achieve this would be for airlines to have a stand-alone Security Management System based on experiences with Safety Management Systems, but bearing in mind the similarities and differences between the two areas.

6.5.2 It was explained that a Security Management System requires that an airline have a strategic vision, mission, policy, goal and objectives in order to establish its strategy plan which would be reflected in the standard operating procedures (SOPs). Integral to this would be a security training audit and testing programme. The Conference was invited to consider how software, hardware and human resources must be integrated to achieve the best security preventive solution. Furthermore, the Conference was invited to note the need to promote the use of innovation and technology as integral elements of the AVSEC Management System in addition to the organization of the security function, training, quality assurance mechanisms such as audits and tests, background checks, improving the skills of AVSEC personnel, and raising the awareness of security by all concerned.

**6.6 DP/6/15 Carriage of Liquid Duty Free Items by Transfer Passengers in View of Restrictions on Liquids and Gels in Hand Baggage**

6.6.1 This paper was presented by Singapore. Noting the foiled terrorist plot in the United Kingdom on 10 August 2006 and the responses adopted to this in various parts of the world. Singapore drew attention to the subsequent action by the Council of the ICAO in referring the matter to its Aviation Security (AVSEC) Panel. The Conference was informed that the Panel met from 11 – 15 September 2006 at the ICAO Headquarters in Montreal and proposed guidance on measures for adoption by Contracting States.

6.6.2 Singapore expressed concern about the implication of these rules on the carriage of liquids, gels and aerosols in hand baggage. Specifically, the Conference was invited to consider the restriction that passengers will not be allowed to carry duty free items that have been purchased outside the European Union through a European transfer point. It was pointed out that this would have a serious impact on service to passengers and on duty-free retail concessions. Singapore proposed a similar harmonization of the EU's sealed bag procedure outside the EU so that passengers from the Asia Pacific with duty-free purchases transferring at EU airports would not be inconvenienced.

**6.7 DP/6/18 August 2006 Aviation Security Alert in the UK**

6.7.1 This paper, which was presented by the United Kingdom, drew the Conference's attention to the recent emergence of a serious and novel form of potential attack upon civil aviation based on the use of a liquid explosive. This necessitated an immediate response with special protective security measures implemented at airports in the United Kingdom notwithstanding that those measures already in place were set at a level exceeding in some respects the requirements of ICAO Annex 17. The Conference was informed about the particular measures adopted and of the subsequent assessment of the effectiveness and impact of these measures. As a result, the security measures at airports in the United Kingdom were revised from 22 September 2006 in order to ease the burden on passengers and industry while ensuring that the security arrangements remained fully robust to the continuing serious threat.

6.7.2 It was explained that Member States of the European Union recognised the significance of the threat globally and immediately enhanced the baseline regulation of aviation security across the Union. Similar measures were introduced in the United States and Canada. ICAO also has acknowledged the need for the global aviation security regime to address this new

attack methodology, and the Organization is currently reviewing the ICAO Prohibited Items List and is preparing advice for all Contracting States on the new *modus operandi*, and on measures being taken by some States in the immediate term pending the development of new technological solutions. The States of the Asia and Pacific Regions were urged to consider an appropriate response to this new security threat in line with those already in place in the European Union, the United States and Canada if they have not already done so.

## **6.8 Discussions on Papers Presented**

6.8.1 IATA commended DP/6/14 and drew attention particularly to paragraph 2.1 which raised the question why we are not treating safety and security the same way and, in particular, applying the concept of SMS to aviation security. IATA noted that the ICAO AVSEC Panel already is working on this and IATA also offered its guidance provided for airlines along these lines. IBAC supported IATA's comments on security management systems and referred to applicable parts of Annex 17 - Security. IBAC informed the Conference that it has not prepared a security management system primarily because of the difficulty for the operator to assess the risks. The key for an operator is to know what the problems are.

6.8.2 Malaysia supported Thailand's concept of a security management system as described in DP/6/14 and saw this as a comprehensive approach that would allow airport operators and airlines to manage their security risks at operational level. China commented that it also has a special working group on this matter and has developed a manual on aviation security management systems. Vanuatu commended Thailand but emphasized that a primary requirement is to have security legislation in place.

6.8.3 In opening discussions on DP/6/5 the Moderator inquired about the definitions of unruly behaviour adopted in China and particularly drew attention to "involuntary" acts of violent behaviour by passengers such as can occur with people with epilepsy. ICAO sought to clarify this and related matters raised in the paper by China. In particular, ICAO explained the difference between unruly behaviour and unlawful interference with civil aviation where safety was put at risk by inappropriate actions by passengers. ICAO also explained that model legislation had been prepared by ICAO in order to harmonise approaches to deal with acts of unruly behaviour. ICAO commended China for its paper and noted the emphasis placed on training and on preventive measures in place at airports to identify potential problems. China's efforts to raise awareness of travelers to their obligations and of the penalties for unruly behaviour also were commended by ICAO.

6.8.4 IATA thanked China for the paper and also thanked ICAO for the clarification provided. IATA drew the Conference's attention to paragraph 1.2 in DP/6/5 and responding to an enquiry about how frequently these incidents are occurring, IATA explained that some of its member airlines are reporting incidents once or twice a week. IATA congratulated China for putting legislation in place so it could deal with the problems. IATA also called for cooperation and harmonization in the deployment of in-flight security officers (IFSOs). The United States echoed the comments of ICAO and applauded China for its proactive approach to deal with cases before they become a major problem on board the flight.

6.8.5 Hong Kong, China informed the Conference that it has a mandate to incorporate the ICAO model legislation on unruly behaviour into law and that it had received positive comments from airline operators because it will make it possible to take legal action when perpetrators of acts of unruly behaviour arrive in Hong Kong irrespective of where they are coming from.

6.8.6 Pakistan inquired of IATA how much of the problem of unruly behaviour is related to alcohol. Pakistan also echoed the comments made by Hong Kong, China and added that the difficulty often arises, not with the law, but with implementation. Pakistan noted that this is yet another area where States need to work together.

6.8.7 ICAO commented that the matter of IFSO's is under review by ICAO's AVSEC Panel, but note was taken of the matter of definition of an IFSO as raised in DP/6/11. ICAO undertook to follow the matter up and to advise the Republic of Korea about the outcomes of the Panel's work. IATA supported standardization of approaches to IFSOs and saw the Memorandum of Understanding developed by the Republic of Korea as a progressive step that will help States standardize their approach.

6.8.8 In reference to DP/6/18 China informed the Conference that it had implemented the measures required by the United States and the European Union regarding the carriage of liquids on board aircraft. China has had a regulation on this matter that requires a screener to open and check the contents of containers. China encouraged other States in Asia and Pacific to begin introducing similar measures on a step by step basis.

6.8.9 The United States emphasized that the risk was not confined to the United Kingdom and the United States on account of their being the target of the particular plot that was uncovered in August 2006. The United Kingdom urged the Conference to recognize that the threat is a new one and it is global in nature.

6.8.10 Singapore explained the difficulties caused by unilateral application of new security measures that could be construed as non-tariff barriers on trade. Singapore urged the Conference to consider facilitation as well as security and to ensure that measures are practicable. IATA echoed the view of Singapore and appealed to the States to seek longer term solutions that do not have adverse impacts on passengers and on the finances of airports as a result of their loss of duty-free sales. The United States agreed that long term solutions need to be found and suggested that technology would play a large part in enhancing security. The United States also observed that a great deal of benefit had already been realized by harmonizing approaches to what is acceptable for carriage as a small plastic bag containing fluids. The United States is working with other stakeholders to find a solution to carriage of duty-free purchases.

6.8.11 ICAO noted the intent of DP/6/15 which called for ICAO to reconsider the approach to the carriage of liquids on board aircraft. ICAO observed the views of the Conference that there is a need to review the matter and consider options that do not compromise security. ICAO undertook to take the matter up within the Secretariat.

## **6.9 Summation by the Moderator**

6.9.1 In summing up the active discussions on this Agenda Item, the Moderator emphasized the importance of human factors in aviation security systems. The contribution being played by the aviation security audits was acknowledged and the Moderator appealed for solutions to new and emerging threats to the security of civil aviation built upon cooperation. The Conference was invited to seek real solutions that harmonize and standardize approached.

6.9.2 The Moderator reminded the Conference about the various topics covered in the papers and observed that, unlike safety, the security threat adapted to any remedial measures as the objective of the parties that would make international civil aviation a target is to seek out vulnerabilities in the system and to defeat any security measures. The Moderator appealed to all States to remain vigilant.

43<sup>rd</sup> Conference of Directors General of Civil Aviation  
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**AGENDA ITEM 7**

**AIR TRANSPORT**

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEM 7: AIR TRANSPORT**

**Moderator: Mr. Shane Carmody**  
**Deputy Chief Executive Officer, Strategy & Support**  
**Civil Aviation Safety Authority of Australia**

**7.1** Three (3) Discussion Papers and thirteen (13) Information Papers were received under this agenda item and the following three (3) Discussion Papers were presented:

<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
<b>AGENDA ITEM 7</b>	<b>AIR TRANSPORT</b>	
DP/7/2	Implementation of Enhanced Travel Documents to Improve Aviation Security and other Passenger Facilitation Measures	ICAO
DP/7/13	Ownership and Control Liberalisation: A Discussion Paper	United Kingdom
DP/7/15	Managing the Environmental Challenges of Air Transportation	IATA

**7.2 DP/7/2 Implementation of Enhanced Travel Documents to Improve Aviation Security and other Passenger Facilitation Measures**

7.2.1 ICAO drew attention to Amendment 19 to Annex 9 - Facilitation - which obliges Contracting States to begin issuing Machine Readable Passports by 1 April 2010. ICAO estimated that as many as 10 States in the Asia and Pacific Regions will need to take action on this matter. ICAO noted that complex matters involving several key stakeholders will need to be addressed at the national level in order to make changes to passports, but it was emphasized that it is in the interest of all States in Asia and Pacific to develop a modern, efficient and secure passenger clearance system. ICAO therefore urged the Conference to consider appropriate action to focus attention of the relevant authorities on the matter and to ensure that assistance is provided to those States in need. ICAO particularly highlighted the example of Bhutan which had recently introduced MRPs.

7.2.2 ICAO also provided a brief overview of related developments to improve the security of travel documents and to take advantage of technologies and processes that will improve the efficiency of handling ever-increasing numbers of passengers at international airports. It was noted that States in Asia and Pacific are at the forefront of applying the specifications developed by ICAO.

**7.3 DP/7/13 Ownership and Control Liberalisation: A Discussion Paper**

7.3.1 This paper was presented by the United Kingdom. The Conference was informed that the Civil Aviation Authority (CAA) of the United Kingdom, in October 2006, published a discussion paper examining the rules governing ownership and control of airlines. In particular, it examined the impact of these on airlines, consumers and employees and considered the situation were they to be removed, and especially how safety regulation might be affected.

7.3.2 The United Kingdom explained its motivation in publishing the report and discussed issues that need to be addressed adequately in order to ensure that safety standards are not compromised. Attention was drawn to the need to establish a closer link between a carrier's operations and regulatory home in order to strengthen lines of accountability and facilitate effective day-to-day regulation of the carrier. The CAA acknowledged that, in the longer term, national and regional safety authorities will need to cooperate more closely to share information across national boundaries. It was explained that the report concluded that there are likely to be substantial benefits from ownership and control liberalisation and it set out a pathway for reform, which if followed, should lead to safer, more efficient and cheaper international aviation. The Conference was invited to note the information and to make use of the report which is available on the CAA's web site.

#### **7.4 DP/7/15 Managing the Environmental Challenges of Air Transportation**

7.4.1 In this paper which was presented by IATA, the Conference was invited to consider the increased importance of CNS/ATM activities in the management of aviation's environmental impacts. IATA recalled that the 33rd General Assembly of ICAO instructed the Council to promote the use of operational measures as a means of limiting or reducing the environmental impact of aircraft engine emissions. Reference also was made to the work of the ICAO Committee on Aviation Environmental Protection (CAEP) and to the Conclusions on aviation and the environment which were adopted at the meeting of ALLPIRG/5 in March 2006. IATA also noted that the APANPIRG Terms of Reference requires APANPIRG to monitor implementation of air navigation facilities and services, taking into account environmental matters.

7.4.2 IATA highlighted the ICAO goal of limiting or reducing the impact of aviation emissions on the global climate and it discussed the importance of APANPIRG's consideration of environmental benefits when defining CNS/ATM systems, including the environmental savings of new routes, terminal procedures and ground movements. IATA appealed to all stakeholders to take a more proactive approach to environmental management and pursue the use of operational measures that can limit or reduce the environmental impact of aircraft engine emissions?

#### **7.5 Discussions on Papers Presented**

7.5.1 The Moderator considered that DP/7/13 was a thoughtful paper and had looked at issues that will face most nations. An observer from CANSO supported the paper and noted that the United Kingdom is at the forefront in the liberalization of ownership and control of airlines, but also of airports and air navigation services providers. CANSO encouraged the Conference to note the conclusion in the paper about the substantial benefits that flow from such economic liberalization and of the importance of having good guidance in place to safeguard safety and security.

7.5.2 The United States expressed strong support for DP/7/15 and its conclusions. The United States expressed its view that ICAO is the appropriate forum in which to make progress on environmental protection measures. The United States urged States to support ICAO which is working to complete the necessary guidance for the option of using emissions trading and move forward to enhance collaboration. The United States also invited the Conference to take note of the information provided in its papers IP/7/8, IP/7/9 and IP/7/10 on related matters.

7.5.3 Japan drew the Conference's attention to its efforts to reduce flight miles and to conclude negotiations with agencies that control and manage airspace near Tokyo with the

objective of reducing emissions from aircraft. Japan is seeking to harmonise its procedures and is looking forward to the publication of ICAO performance-based air navigation manuals. Also in commenting on DP/7/13, a delegate from China supported IATA and informed the Conference that China places importance on environment protection. China also supported application of the principles and provisions set out by the Kyoto Protocol and especially drew the Conference's attention to the treatment of developing countries in any emissions trading regime.

7.5.4 New Zealand supported IATA in its observation that the aviation industry had a commendable record on improving its environmental performance and that this should be given greater prominence. However, New Zealand considered that more could be done and there is a need to pursue improvements to airspace management. The Conference was invited to note the experience in New Zealand whereby operators have increased their profits by replacing their older aircraft with newer equipment. CANSO supported these views and also drew attention to the ICAO Worldwide Symposium on Performance of the Air Navigation System and the importance of work which will document improvements in the performance of civil aviation.

7.5.5 Singapore drew attention to the operational improvements being achieved under the auspices of APANPIRG and of the consequential environmental benefits. Singapore provided details of some of the initiatives that it had been involved with including the development of new routes between Jakarta and Hong Kong, China and Jakarta to Kuala Lumpur. Another example was the implementation of reduced longitudinal separation in the South China Sea and Singapore will support extension of this initiative into the Bay of Bengal.

7.5.6 ICAO reminded the Conference that it has had a strong focus on the environment and APANPIRG is active in seeking out ways to implement improvements to air navigation systems that deliver substantial environmental protection benefits. ICAO also has produced estimates of the dollar value on these benefits but it was noted that more work could be done in this area. ICAO also drew attention to its work on aircraft noise and particularly the recent conduct of a Noise Certification Workshop in Bangkok in October 2006 and the intention to make the noise certification database available on ICAO's web site.

## **7.6 Summation by the Moderator**

7.6.1 The Moderator acknowledged DP/7/2 and drew attention to the impacts of machine readable passports and electronic passports and the fact that these will become more critical in the passage of time.

7.6.2 Turning to DP/7/13, the Moderator noted the support expressed for the United Kingdom's paper by CANSO and the Conference was urged to manage the process of economic liberalization of air transport so that safety and security are not compromised. Accordingly, the Moderator commended DP/7/13 to the Conference.

7.6.3 IATA was thanked for the comprehensive coverage of aviation and environmental protection in its paper DP/7/15 and note was taken of the strong interest generated during discussions. One of the themes raised in the paper and in discussion was that civil aviation has delivered outcomes that significantly reduce harmful emissions by aircraft, but this was not always appreciated in public debates. The Conference felt that much more needs to be done to publicize this performance and, in this regard, attention had been focused on the ICAO Worldwide Symposium on Performance of the Air Navigation System to be held in Montreal in March 2007. At the same time the Conference had acknowledged the need to do more to improve the environmental performance of civil aviation. The Conference particularly noted the mandate of APANPIRG and its good work. The Moderator also noted the views expressed about the need for

all States to support ICAO's work on environmental protection, particularly in the context of initiatives on emissions trading.

7.6.4 In closing the Agenda Item the Moderator thanked the presenters of the papers and drew the Conference's attention to the substantial amount of the information contained in the information papers for this Agenda Item and encouraged the delegates to make good use of it.

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**AGENDA ITEM 8**

**TECHNICAL COOPERATION**

Bali, Indonesia: 4 to 8 December 2006

**AGENDA ITEM 8: TECHNICAL COOPERATION**

**Moderator: Mr. Phala Dorji  
Director of Civil Aviation  
Department of Civil Aviation, Bhutan**

**8.1** Four (4) Discussion Papers and one (1) Information Paper were received under this agenda item and the following four (4) Discussion Papers were presented:

REF.	TITLE	PRESENTED BY
<b>AGENDA ITEM 8</b>	<b>TECHNICAL COOPERATION</b>	
DP/8/1	ICAO Technical Cooperation Programme Interventions in Asia and Pacific Regions	ICAO
DP/8/2	ICAO Regional Programmes in Asia and Pacific Regions	ICAO
DP/8/3	Cooperative Arrangements for the Prevention of Spread of Communicable Diseases Through Air Travel (CAPSCA)	ICAO
DP/8/5	Republic of Korea's Civil Aviation Training Program	Republic of Korea

**8.2 DP/8/1 ICAO Technical Cooperation Programme Interventions in Asia and Pacific Regions**

8.2.1 This paper was presented by the ICAO Secretariat. Over the last 54 years, the Technical Cooperation Programme of ICAO has implemented almost US\$2 billion worth of civil aviation projects, of which approx. US\$700 million worth of projects were implemented in the last three years. This is clear evidence of the confidence being placed in ICAO technical cooperation programme by the contracting States. Recipient countries' own resources and donor support for the execution of technical cooperation projects are now the prime sources of funding, as UNDP funding has been substantially reduced in the last 15 years. The contracting arrangements for execution of these projects have almost exclusively been through the Trust Funds, Management Service (MSA) and Civil Aviation Purchasing Service (CAPS) Agreements.

***Review of Global ICAO Technical Cooperation Activities in 2005***

8.2.2 The global ICAO Technical Cooperation (TC) Programme for 2005 was valued at US\$146.0 million, of which US\$115.9 million (or 79 per cent) was implemented. During the year, the Technical Co-operation Bureau (TCB) of ICAO executed 277 projects in 113 developing countries and a total of 19 new and revised large-scale projects were approved. The TCB employed 463 experts from 44 countries to work in its field projects (also 1,962 national professionals, locals and UN volunteers in 2004). 509 fellowships were awarded and procurement expenditures for field projects totalled US\$81.25 million, a very notable expansion compared to 2004.

8.2.3 The fact that recipient States provided most of this funding strongly confirms their satisfaction with the technical cooperation services provided by ICAO, for the worldwide implementation of ICAO Standards and Recommended Practices (SARPs), particularly in the areas of flight safety, aviation security, CNS/ATM, aerodrome and ATM development and certification, SMS as well as equipment procurement.

#### *Asia and Pacific Regions*

8.2.4 The ICAO Technical Cooperation Programme is implemented through both country and regional projects. Presently, 56 country-specific projects are under implementation in 17 countries, and 30 more projects are being considered in 13 countries of the Asia/Pacific Regions. The current programme level for Asia and the Pacific is \$30 million with an expected implementation of \$25 million for 2006. Additionally, the projection for the Asia and Pacific programme for 2007 is \$33 million. The major increase of the programme for both 2006 and 2007 is due to the expected procurement of equipment for two countries in the region. Additionally, 10 regional projects are under implementation. These projects comprise of COSCAP South Asia, South East Asia, North Asia, CASP Asia/Pacific, Cooperative Arrangement for Preventing the Spread of Communicable Diseases through Air Travel (CAPSCA), three IFFAS Grants providing funding to COSCAP programmes, and two EC Grants providing funding to COSCAP South Asia and North Asia. One regional project entitled Cooperative Agreement for Enhancement of the Meteorological Service for Aviation in the South Pacific (CAEMSA-SP) is under resource mobilization.

8.2.5 While recipient countries' own resources are the primary sources of funds for projects implemented by the Technical Co-operation Bureau, third-party funding for technical cooperation activities in Asia and Pacific Regions has been provided by the following partners and donors: Association of Asia Pacific Airlines (AAPA), Airbus, Asian Development Bank (ADB), Boeing, Bombardier, European Commission (EC), FAA, France, International Financial Facility for Aviation Safety (IFFAS), Norway, and Transport Canada.

8.2.6 Following the 33<sup>rd</sup> Assembly's support to the adoption of a structure and implementation mechanism for the Technical Co-operation Bureau that uses commercially oriented practices for cooperative partnership with funding partners and recipient States, the 35<sup>th</sup> Assembly encouraged TCB to cooperate with non-State entities (public or private) directly involved in civil aviation while continuing to operate within the rules, regulations and procedures of ICAO.

8.2.7 The Conference was invited to note the need of States/Administrations for, and the extent to which they make use of ICAO's Technical Cooperation Programme. The Conference was invited to urge States to take full advantage of the services of ICAO's Technical Co-operation Bureau (TCB) whenever assistance in civil aviation was required.

### **8.3 DP/8/2 ICAO Regional Programmes in Asia and Pacific Regions**

8.3.1 In this paper which was presented by ICAO, the Conference was informed about the progress of the three Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAP) in Asia were reviewed in detail.

8.3.2 The COSCAP programmes have had considerable success in improving States oversight capabilities in a cost effective manner, even though the programmes have limited resources in which to achieve programme objectives. While there is generally little funding available for payment to other organizations for outside training, the programmes have had considerable success in receiving support from donor organizations. Another means to support the

COSCAP programme is the donation of training material, following which the COSCAP experts provide the subsequent training programmes. ICAO also assists the COSCAP programmes as resources permit. While the main focus of the COSCAP mechanisms is safety oversight of Flight Operations, Airworthiness and Licensing, most COSCAP programmes have expanded to provide assistance in the areas of Aerodromes, Air Traffic Management, Dangerous Goods, Accident Prevention and others. A third phase has just been approved for COSCAP-South Asia and a second phase for COSCAP-North Asia, while a further phase for COSCAP-South East Asia is under consideration. Three additional IFFAS grant applications have been submitted and their approval is awaited.

8.3.3 All three programmes continued with their Regional Aviation Safety Teams (RAST) and provided substantial assistance with the development of regulatory and guidance material. On-the-job-training and training through workshops and seminars was continued and a very substantial number of safety inspectors and operator personnel participated in the training provided.

8.3.4 Since the three COSCAP Programmes in Asia have considerably different numbers of participant States, re-balancing of the three COSCAPs in terms of number of participant States was raised and States and ICAO were requested to review this matter.

8.3.5 The progress of the establishment of the Cooperative Aviation Security Programmes (CASP-AP) for Asia/Pacific was also reviewed, based upon the resolutions of the 33rd Assembly of ICAO and the conclusions of the High-level Ministerial Conference on Aviation Security which emphasized, inter-alia, the need for a global and comprehensive aviation security plan of action.

8.3.6 CASP-AP is open to all States and Administrations in the Asia/Pacific Region. 19 States/Administrations have joined and two more are planning to join at present. The programme has provided assistance in evaluating and revising national civil aviation security programmes, evaluating and revising legislation relating to aviation security, and preparing a sample national AVSEC training programme. A training course for aviation security staff was held in Phnom Penh in March 2006. A workshop was held in Bangkok in September 2006 to assist States and Administrations to develop a National Civil Aviation Security Training Programme (NCASTP). The first in a series of training course for aviation security instructors was held in Kathmandu in October 2006 and it is intended to hold similar training courses in Bhutan and Cambodia before the end of 2006.

8.3.7 The Cooperative Arrangement for Preventing the Spread of Communicable Diseases through Air Travel (CAPSCA) is aimed at reducing the risk of spreading Avian influenza and similar communicable diseases by air travellers. Hong Kong SAR, Indonesia, Macao SAR, Singapore and Thailand have joined this project, which commenced with a seminar/workshop/table-top exercise held in Singapore in September 2006. The first airport evaluation has been carried out and further evaluations are planned for December 2006 and early 2007.

8.3.8 The Cooperative Agreement for Enhancement of the Meteorological Service for Aviation in the South Pacific (CAEMSA-SP) is aimed at improving the safety and efficiency of air transport operations in the region by enhancing the meteorological services in the South Pacific. Cook Islands, Fiji Islands, Kiribati, Samoa, and Tonga have confirmed interest in this programme and requested ICAO to seek funding. An IFFAS grant application has been submitted and its approval is awaited.

**8.4 DP/8/3 Cooperative Arrangement for the Prevention of the Spread of Communicable Diseases through Air Travel (CAPSCA)**

8.4.1 This paper was presented by the ICAO Aviation Medicine Expert/Project Coordinator. The progress of the Cooperative Arrangement for the Prevention of the Spread of Communicable Diseases through Air Travel (CAPSCA) was reviewed in detail.

8.4.2 Taking a proactive approach to addressing the impact of a possible pandemic to air travel, ICAO developed an aviation related preparedness plan by holding two back-to-back meetings on the subject between 7 and 10 February 2006. The meetings produced a document entitled “Preparedness Planning Guidelines (Aviation Aspects) for a Communicable Disease of Public Health Concern.”

8.4.3 Following the above meetings, ICAO prepared a project document aiming at reducing the risk of spreading influenza having pandemic potential, and similar communicable diseases, by air travellers through co-operative arrangements between the Participating States/Administrations and airports. This will be achieved initially by the application and implementation of ICAO Guidelines for preventing the spread of communicable diseases at major international airports. States/Administrations in the Asia Pacific regions were invited to participate in the project, which commenced with a seminar/workshop/table-top exercise in Singapore in September 2006. Other activities of the project involve a review of States/Administrations, airports and airlines preparedness plans to ensure that the relevant policies, training and communication procedures are in place. The first airport evaluation was carried out and further evaluations are planned for December 2006 and early 2007.

8.4.4 The Conference was invited to endorse the objective of a harmonized Pandemic Preparedness Plan for the aviation sector and to urge all States/Administrations of the Asia/Pacific Regions to approve the project document and to join CAPSCA.

**8.5 DP/8/5 The Republic of Korea – ICAO Fellowship Training Programme for Developing Countries**

8.5.1 This paper was presented by the Republic of Korea. The Government of the Republic of Korea signed a Memorandum of Understanding (MOU) on the subject with ICAO in September 2006. In accordance with this MOU, the Republic of Korea will initially provide 117 training fellowships to qualified trainees from developing countries in the Asia and Pacific region during the period from 2007 to 2009 in order to promote balanced development of international civil aviation.

8.5.2 The fellowship programme includes three training courses – GNSS, DVOR Maintenance, and Radar Approach Control – to be conducted once every year at the Korea Civil Aviation Training Center. The Republic of Korea plans to further develop and improve the training courses to international standards.

8.5.3 ICAO and the Republic of Korea will jointly manage the fellowship training programme. ICAO will notify States of the fellowship programme, receive applications from States and inform the Republic of Korea of these applications. The Republic of Korea will make selection of suitably qualified applicants and ICAO will issue the fellowship awards.

8.5.4 The Republic of Korea will provide funding to cover tuition fees, accommodation fees, daily expenses and air fare for the route where national airlines of the participant’s home country do not operate.

8.5.5 The Conference was invited to note the information provided on the Republic of Korea – ICAO Fellowship Training Programme for Developing Countries and to encourage States/Administrations to take full advantage of the training courses provided through active participation in the programme.

## **8.6 Discussions on the Papers Presented**

8.6.1 China expressed appreciation to ICAO for information provided in DP/8/1 about its Technical Cooperation Programme. It was noted that the size of the COSCAPs in terms of the number of States involved varies across the three programmes. China requested that consideration be given to achieving a balance of membership in the interests of improving efficiency and representation. ICAO noted that the matter raised by China is under discussion in view of resource constraints and also noted that three additional States are considering joining COSCAP-SEA. ICAO also referred the matter of balancing membership to the States/Administrations to consider this as their discretion.

8.6.2 Papua New Guinea, as the Deputy Chairman of the Safety Oversight Office of PASO, drew attention as well to the work of PASO. He informed the Conference that significant financial support has now been provided to PASO by IFFAS and the Asian Development Bank. As an inter-governmental body, PASO provides technical advice and assistance to its member States. PASO is able to achieve economies of scale in a collaborative mechanism and ICAO was thanked for the support it had provided. In addition, the support of the governments of Australia, New Zealand and the United States was acknowledged.

8.6.3 Referring to DP/8/2 ICAO highlighted the many activities undertaken through regional cooperation programmes. ICAO expressed satisfaction that practically all of the States are now covered by regional programmes. The policy of exchanging knowledge and resources and of the spirit of cooperation has proven to be very successful. ICAO placed on record its appreciation of the work of the three COSCAPs and to PASO. ICAO encouraged PASO to provide information on its activities on a regular basis as appropriate and congratulated PASO on the progress it had made thus far. ICAO urged the Conference to consider the need to put more resources into the safety teams established by the COSCAPs.

8.6.4 Singapore added comments on DP/8/2 and expressed its full support for the regional programmes. Singapore also reminded the Conference about the activities conducted at the Singapore Aviation Academy and encouraged all States/Administrations to make full use of the opportunities on offer. China also confirmed that it will continue to support COSCAP-NA.

## **8.7 Summation by the Moderator**

8.7.1 The Moderator, in conjunction with the ICAO Secretariat and while thanking the delegates for their active participation and valuable inputs on Agenda Item 8, summarized the session's salient points. First, the efforts and increased size of ICAO's Technical Co-operation Programme worldwide and in the Asia Pacific Regions as well as its availability to States and Administrations including to the private sector was noted.

8.7.2 The Moderator took note of the increased necessity for cooperation, including ICAO's technical cooperation, for achieving higher levels of aviation safety and aviation security which is considered very important not only for the Asia and Pacific Regions, but globally.

8.7.3 Attention also was focused on the sub-regional cooperative safety programmes initiated by ICAO and States, as well as on the experience of States/Administrations. The

Moderator pointed out the importance of having the full support of the Member States to COSCAP as well as by multi-lateral and bi-lateral partners and industry and the contributions by China were acknowledged with gratitude.

8.7.4 The Moderator drew the Conference's attention to the progress achieved by ICAO in the implementation of the Cooperative Aviation Security Programme (CASP-AP) in Asia and Pacific regions. The importance of having all States/Administrations in the Regions joining this programme was highlighted and the Moderator noted the request for the provision of full support by States as well as by multi-lateral and bi-lateral partners including industry.

8.7.5 The Moderator commended ICAO for its proactive initiative in establishing the Cooperative Arrangement for Preventing the Spread of Communicable Diseases through Air Travel (CAPSCA). Increased co-operative efforts in this subject were considered to be very important and all States/Administrations in Asia and Pacific were urged to join this new project.

8.7.6 Finally, the information provided by the Republic of Korea on the ICAO Fellowship Training Programme for Developing Countries was noted with appreciation. States/Administrations were encouraged to take full advantage of the training courses provided.

8.7.7 The Moderator thanked the delegates for their cooperation and adjourned the session on Agenda Item 8.

## **AGENDA ITEM 9**

### **OTHER BUSINESS**

- A: Theme Topic for the 44<sup>th</sup> Conference of DGCA's**
- B: Endorsement of Action Items arising from the present Conference**
- C: Any other matters**

**AGENDA ITEM 9: OTHER BUSINESS**

*A) Theme Topic for the 44th Conference of DGCAs*

*B) Endorsement of Action Items arising from the Present Conference*

**Moderator: Captain John Jones  
Chief Executive Director of Civil Aviation  
Civil Aviation Authority of New Zealand**

**9.1** Four (4) Discussion Papers and one (1) Information Paper were received under this agenda item and all five papers were presented:

<b>Ref.</b>	<b>Title</b>	<b>Presented by</b>
DP/9A/1	Possible Theme Topic for the 44th Session of the Conference - 2007	ICAO
DP/9B/1	List of Action Items arising from the Present Conference	ICAO
DP/9C/1	Schedule of Meetings/Seminars/Workshops to be Convened in 2007 by the ICAO Asia and Pacific Office	ICAO
DP/9C/2	Schedule of Conferences of Directors General of Civil Aviation, Asia and Pacific Regions in the Foreseeable Future	ICAO

**9.2 DP/9A/1 Possible Theme Topic for the 44th Session of the Conference - 2007**

9.2.1 The ICAO Secretariat, in presenting the paper, advised that it had 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 had become customary for a topic or topics to be proposed on the basis of informal consultations and for the Conference to agree to one theme topic by consensus.

9.2.2 At the request from the Moderator, the ICAO Secretariat presented two possible theme topics offered by Nepal in DP/1/6 which generated lively discussions. Delegates from IATA, the United States, Vanuatu, Pakistan and Singapore contributed to the deliberations. The Conference agreed that the focus should continue be on expanding the implementation of Safety and Security Management Systems throughout the Region with emphasis on sustainable solutions. Subsequently, the Conference adopted the following theme topic for the 44th Session of the Conference to be held in Xi'an, China from 22-26 October 2007.

*“Sustainable practices for safety and security management systems”*

**9.3 DP/9B/1 List of Action Items Arising from the Present Conference**

9.3.1 The Conference, prior to reviewing the Action Items, took note of the tragic events of 11 September in the United States and reiterated its total condemnation of such terrorist acts. The Conference reaffirmed its collective determination to take such actions as may be necessary to prevent any recurrence.

9.3.2 The ICAO Secretariat presented a List of Action Items arising from the deliberations during the Conference. The Conference reviewed each Action Item and, after some amendments and incorporation of two more subjects proposed by Singapore and Australia, endorsed 12 Action Items of the 43rd Conference.

9.3.3 In summing up the discussions on agenda items 9A and 9B, the Moderator urged the delegates to put effort on the follow up of the endorsed Action Items so that the 44th Conference could record progress on the selected important subjects in the fields of safety, security and environment.

**AGENDA ITEM 9: OTHER BUSINESS**

*C) Any Other Matters*

**Moderator: Mr. Joseph Kasten**  
**Director**  
**Civil Aviation Authority of Vanuatu**

**9.4 DP/9C/1 Schedule of Meetings/Seminars/Workshops to be convened in 2007 by the ICAO Asia and Pacific Office**

9.4.1 The ICAO Secretariat presented this paper which provided a tentative schedule of meetings, seminars and workshops to be convened in 2007 by the ICAO Asia and Pacific Office. The schedule was tentative and outlined a total of 26 meetings, seminars and workshops to be held in the year 2007. The schedule was published to assist States in planning their attendance.

9.4.2 India proposed inclusion of additional meeting in the Tentative Programme on the subject of SMS in the form of workshop or seminar, which was in unison with the adopted Action Item 43/. of this Conference. The ICAO Secretariat took note of the proposal by India and will investigate the possibility of organizing such an event.

**9.5 DP/9C/2 Schedule of Conferences of Directors General of Civil Aviation, Asia and Pacific Regions in the Foreseeable Future**

9.5.1 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. He stated that on the basis of consultations with them, the following schedule has been developed:

44th Conference in Xi'an	22 – 26 October 2007
45th Conference in Malaysia	October/November 2008
46th Conference in Japan	September/October 2009
47th Conference in China Macao	August/September 2010
48th Conference in New Caledonia, France	September 2011
49th Conference in Maldives	September 2012

9.5.2 Australia proposed that the time for the 44th Conference may be reconsidered in view of the schedule for the 36th Session of the Assembly in September 2007. It would have merit for the 44th Conference to be held before the Assembly to allow coordination and consolidation of regional views. This proposal was supported by other delegates. However, China explained that at this stage it was very difficult to find a time slot for the 44th Conference in August, which was extremely busy period of the year.

9.5.3 The Moderator invited China to present the delegates with information about the venue of the 44th DGCA Conference.

9.5.4 Dr. Fang Liu, Director International Affairs Division, Department of International affairs & Cooperation, General Administration of Civil Aviation of China, who will be the host for the next Conference from 22 to 26 October 2007, expressed her appreciation to the Directorate General of Civil Aviation of Indonesia for the excellent arrangements that had made the Conference such a success. She strongly believed that the action items arising from the Conference would be implemented by every administration in the Asia/Pacific region in a timely manner that will contribute to the future development of civil aviation in the region. She extended a warm welcome, on behalf of the Government of China to the delegates to the 44th DGCA's Conference to be held at Xi'an, China. She sought the indulgence of the Conference to provide a slide/video presentation of the infrastructure, facilities and services available in China.

9.5.5 Under Any Other Matters, Australia presented an announcement just released by the Government of Australia on new air security regulations for carry on baggage. Australian Government will introduce enhanced security measures to limit the amount of liquids, aerosols and gels that can be taken through the screening point. This regulation will harmonize Australian practice with international action that has recently been taken by the United States, Canada and the European Union and the recommendation by the International Civil Aviation Organization (ICAO). The Moderator thanked Australia for presenting this important update to the Conference.

43<sup>rd</sup> Conference of Directors General of Civil Aviation  
Asia and Pacific Regions

# **CLOSING REMARKS**

Bali, Indonesia: 4 to 8 December 2006

## **CLOSING REMARKS**

1. The Chairman thanked the delegates for their active participation, cooperation and contribution that made the Conference so productive and successful. In keeping with the tradition, he invited the delegates to make their concluding remarks if they so desired.
2. The delegates while expressing their appreciation to the Chairman of the Conference, the ICAO Regional Director of the Asia Pacific Regional Office and their teams of dedicated officers, were truly grateful and appreciative of the efficiency on the conduct of the Conference and gracious hospitality that was extended. All the delegates expressed their thanks for the administrative arrangements and logistics support provided. The delegates also recorded their profound gratitude on their own behalf and that of their spouses for the excellent arrangements made for social and cultural programmes. All the delegates expressed their appreciation to the Government of Republic of Indonesia, the Ministry of Transportation and the Directorate General of Civil Aviation, the many sponsors and exhibitors and the many people working behind the scenes whose hard work made the Conference such a success and the occasion so memorable. The delegates also paid tribute to the moderators whose efficiency had enabled the Conference to be conducted smoothly.
3. The ICAO Regional Director, Mr. Lalit B. Shah, while reviewing major events of the Conference, complimented Mr. Tatang, Director General of Civil Aviation, Republic of Indonesia, for his leadership and efficient conduct of the Conference and thanked him profusely, as well as his dedicated team of officials for their outstanding performance, courtesy and support to the Conference. Mr. Shah also conveyed best wishes and sincere thanks to the Minister of Transportation of Republic of Indonesia and the local government of Bali. Mr. Shah reflected that the 43<sup>rd</sup> Conference was perhaps the last one served by him since he would soon retire. He recalled the status of aviation business at the time he joined aviation more than 40 years ago. The technological progress throughout the years was tremendous, however, he stressed on the progress in the cooperation, for which the DGCA Conference was a major contributor. Mr. Shah expressed his sincere thanks to all delegates for the excellent cooperation and hospitality extended to him. Finally, Mr. Shah expressed his believe that Asia and Pacific should continue be regarded as one region and wished to see further cohesion and collaboration.
4. Mr. Tatang thanked all the delegates for their participation and their kind remarks. He greatly appreciated and valued ICAO's cooperation and support to the Conference and thanked the ICAO Regional Director for his effort in enlightening the delegates on complex and difficult issues which helped to steer the Conference in an orderly manner. He placed on record his appreciation of the excellent work done by the organizing committee from the Directorate General of Civil Aviation, the ICAO Regional Office and other organizations that had helped to make this Conference a memorable event and wished all delegates a happy and safe trip home.
5. The 43<sup>rd</sup> Conference of Directors General of Civil Aviation Asia Pacific Region was closed at 12.45 on 8 December 2006.

43<sup>rd</sup> Conference of Directors General of Civil Aviation  
Asia and Pacific Regions

# **APPENDICES**

Bali, Indonesia: 4 to 8 December 2006

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## LIST OF ACTION ITEMS ARISING FROM THE 43<sup>RD</sup> CONFERENCE

Action Item 43/1

### **Resolution of Deficiencies**

Recognizing the adverse impact on safety, efficiency and regularity of air transport and noting the development of a regional performance objective on elimination of deficiencies expressed in APANPIRG Conclusion 17/54, the Conference:

- a) Strongly urged the Asia Pacific States listed in the APANPIRG List of deficiencies to establish action plans with fixed target dates for resolution of all safety related deficiencies and notify ICAO Regional Office by mid 2007 of their plans; and
- b) Urged all Asia Pacific States to collaborate in resolving of the safety related deficiencies according to the established action plans.

Action Item 43/2

### **Safety Management Systems (SMS)**

Recognizing the importance of a systems approach to safety, the Conference:

- a) Urged States in the Asia Pacific region to implement the ICAO Standards for Safety Management Systems (SMS) as soon as possible;
- b) Encouraged States to enhance regional cooperation in developing the safety culture in aviation;
- c) Agreed on the need for implementation of SMS by all aviation stakeholders including aircraft maintenance organizations.
- d) Requested States who already implemented SMS to assist through sharing their experience, making available guidance material and provision of training.

Action Item 43/3

### **Filing of Differences**

Recognizing that the ICAO USOAP has highlighted the fact that many States face difficulties in meeting their obligations, under Article 38 to the Chicago Convention in respect of notification of differences, the Conference:

- a) Urged States, that have not already done so, to make use of the ICAO USOAP Annex Compliance Checklists, using the ICAO web-based system wherever possible, to assist in the identification of differences and to notify ICAO in a timely manner of their compliance status with respect to or differences from SARPs;
- b) Urged States to improve reporting of significant differences through the States' AIP in accordance with Annex 15;

- c) Urged ICAO to expedite performance improvements to its web-based Annex Compliance Checklist database system to make it easier for States to maintain their compliance data on a continuous basis; and
- d) Urged ICAO Council to review its “Note on the notification of differences” in order to provide additional guidance to assist State in the identification of any differences with a view to adopting criteria for the notification of differences similar to those in force prior to March 2006.

Action Item 43/4

**Funding of Safety Monitoring**

Recognizing the importance of establishing sustainable approaches to the funding of safety monitoring so that on-going CNS/ATM implementation initiatives in Asia/Pacific will not be delayed and that safety and efficiency will not be compromised, the Conference:

- Urged the administrations associated with the APANPIRG Task Force on establishment of Regional Airspace Safety Monitoring Committees, to designate, at their earliest possible convenience, appropriately empowered experts to participate in the Task Force.

Action Item 43/5

**Language Proficiency**

Recognizing the need to ensure that all the States meet the applicability date of 5 March 2008 on Language Proficiency, the Conference:

- a) Urged all States, which do not currently meet the required level of languages proficiency, to take urgent steps towards implementation of the language proficiency requirements;
- b) Urged States to complete and return the questionnaire concerning implementation of language proficiency requirements issued with State Letter AN 12/44-06/90 dated 27 October 2006, concerning implementation of language proficiency requirements, by 15 January 2007; and
- c) Encouraged States and other stakeholders to attend the Second International Aviation Language Symposium which will be conducted from 7 to 9 May 2007 in Montreal.

Action Item 43/6

**Aerodrome Certification and SMS**

Recognizing the importance of Annex 14 provisions related to certification and safety management systems for aerodromes and noting Assembly resolution A35-14, which resolve that States shall undertake certification of aerodromes and should ensure that safety management systems are introduced at their aerodromes, the Conference:

- a) Strongly urged States in the Asia Pacific Region to allocate high priority and adequate resources in implementing the

requirements of aerodrome certification and safety management system in aerodromes; and

- b) Encouraged further regional cooperation and collaboration in capacity building of the Administrations and service providers in this regard.

Action Item 43/7

**Preparation for WRC 2007**

Recognizing the crucial importance of protecting the aeronautical frequency spectrum at the World Radiocommunication Conference in 2007 (WRC-2007), the Conference:

- a) Strongly urged Asia Pacific States to participate in the Asia-Pacific Telecommunity (APT) Preparatory Meetings and the Regional Preparatory Group Meeting for WRC 2007 in Bangkok in early 2007;
- b) Urged Civil Aviation Administrations to work closely with the relevant national authorities to ensure support to the ICAO position at the WRC 2007.

Action Item 43/8

**Aviation Security Audit Programme (USAP)**

Noting that Aviation Security continues to be a major area of concern, the Conference:

- Strongly urged States that have been audited by ICAO USAP to implement their corrective action plans in a timely manner with the highest priority.

Action Item 43/9

**Carriage of Liquids, Gels and Aerosols in Hand Baggage**

Recognizing the serious impact of the additional preventive security measures on the carriage of liquids, gels and aerosols in hand baggage have on service to passengers and on duty-free retail concessions, the Conference:

- a) Recommended to ICAO to support facilitation of efficient passenger movement through the air transport system by harmonizing the restrictions on the carriage of liquids, gels, aerosols and duty-free items in hand baggage;
- b) Urged all States to recognize the validity of harmonizing the sealed bag procedures; and
- c) Strongly recommended that all security measures be developed after full consultation and coordination with other regions/States and with all stakeholders with a view to international harmonization as far as practicable.

Action Item 43/10

**Machine Readable Passports**

Recognizing the provisions in Annex 9, in particular Standard 3.10 which requires all contracting States to introduce Machine Readable passports (MRPs) by 1 April 2010, the Conference:

- Urged States which are able to do so to collaborate to the extent possible to assist States in facilitating the implementation of MRPs.

Action Item 43/11

**Training Arrangements**

Noting with gratitude fellowship training arrangements made available by States in the Region, the Conference encouraged:

- a) ICAO to advise States of fellowship offerings as soon as possible;
- b) States to fully utilize the fellowships to be offered;
- c) States in a position to do so to consider instituting similar fellowship training arrangements through ICAO, supporting transfer of civil aviation knowledge in the Regions.

Action Item 43/12

**Management of Aviation's Environmental Impacts**

Recognizing the increased importance of CNS/ATM activities in the management of aviation's environmental impacts, and in support of the ICAO goal of limiting or reducing the impact of aviation emissions on the global climate, the Conference:

- a) Urged States to recognize the mandate for ICAO to review how aviation can limit or reduce the emission of greenhouse gases;
- b) Urged States to support the mandate for APANPIRG to address environmental matters, and therefore the need to consider the environmental issues when defining CNS/ATM systems, including the environmental savings of new routes, terminal procedures and ground movements;
- c) Recognized the importance of developing a simple and cost effective common methodology to assess and document environmental benefits to airspace and CNS/ATM planning initiatives; and
- d) Urges States to commit to a proactive approach by promoting the use of operational measures including slot allocations that can limit or reduce the environmental impact of aircraft engine emissions.

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**LIST OF DISCUSSION AND INFORMATION PAPERS**

<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
<b>AGENDA ITEM 1</b>	<b>THEME TOPIC:</b> <b><i>“Sustainable Practices for Enhanced Safety Oversight and Security”</i></b>	
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DP/1/2	IOSA – The IATA Operational Safety Audit Programme: Opportunities for Regulatory Authorities	IATA
DP/1/3	Application of Industry Safety and Security Codes of Practice for Business Aviation Operations	IBAC
DP/1/4	Modernizing Annex 6 Part II – Standards and Recommended Practices for International General Aviation – Aeroplanes	IBAC
DP/1/5	U.S. Approach to Safety Management System (SMS) Implementation: Commercial Air Operators and Approved Maintenance Organizations	United States of America
DP/1/6	Safety Enhancement Efforts and Challenges of Sustainable Practices in Nepal	Nepal
DP/1/7	ICAO Universal Safety Oversight Audit Program (USOAP) Vision for the Future following Completion of Current Audit Cycle (2005-2010)	United States of America
DP/1/8	ICAO Provision of Direct Assistance to Air Operators ICAO Safety Audits of International Airlines	United States of America
DP/1/9	Differences to ICAO SARPS	United Kingdom
DP/1/10	Managing Compliance with ICAO SARPS and ICAO State Letters	Republic of Korea
<b>AGENDA ITEM 2</b>	<b>REVIEW OF ACTION ITEMS ARISING FROM THE 42<sup>ND</sup> CONFERENCE</b>	
DP/2/1	Responses from Administrations to Action Items Arising from the 42nd Conference of Directors General of Civil Aviation, Asia and Pacific Regions	ICAO
DP/2/2	Review of the Asia Pacific Consultative Link	Australia

<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
DP/2/3	Enhanced Representation and Cooperation for Asia and the Pacific	Australia on behalf of a Working Group of representatives from Cambodia, China, DPR Korea, Japan, Malaysia, Mongolia, New Zealand, Pakistan, the Republic of Korea, Samoa, Singapore, Tonga, Vanuatu and Australia
IP/2/4	Annual Report of the Montreal Group of Asia/Pacific Council Representatives	Republic of Korea on behalf of the Montreal Group of Asia/Pacific Council Representatives
<b>AGENDA ITEM 3</b>	<b>AIR NAVIGATION PLANNING AND IMPLEMENTATION</b>	
DP/3/1	APANPIRG Activities – Outcomes of APANPIRG/17	ICAO
DP/3/2	Air Traffic Flow Management (ATFM) Procedures	ICAO
DP/3/3	Aerodrome Certification & Status of Implementation in the Asia/Pacific Region	ICAO
IP/3/4	Airbus A380 Wake Vortex - Revised Guidance Material	ICAO
DP/3/5	Worldwide Symposium on Performance of the Air Navigation System	ICAO
DP/3/6	Air Navigation Deficiencies – Outcome of APANPIRG/17	ICAO
DP/3/7	Proposal for the Development of Air Route in Nepal	Nepal
IP/3/8	Next Generation Air Transportation System (NGATS)	United States of America
DP/3/9	The Implementation of Reduced Vertical Separation Minimum (RVSM) in China	People's Republic of China
IP/3/10	The Key Issues on Increased Airspace Capacity / Implementation of Surveillance Systems in Mongolia	Mongolia

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<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
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DP/3/12	Bay of Bengal Cooperative Air Traffic Flow Management Advisory System (BOBCAT)	Thailand
DP/3/13	U.S. Approach to Safety Management System (SMS) Implementation: Certificated Airport Operators	United States of America
<b>AGENDA ITEM 4</b>	<b>CNS/ATM IMPLEMENTATION ACTIVITIES</b>	
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DP/4/2	CNS/ATM Implementation Activities in Nepal	Nepal
DP/4/3	Preparation for World Radiocommunication Conference (WRC-2007)	ICAO
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IP/4/6	Terminal Aeronautical GNSS Geodetic Survey Program Collaboration in the Asia Pacific Region	United States of America
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IP/4/8	Status of the U.S. Wide Area Augmentation System (WAAS)	United States of America
IP/4/9	The United States Effort to Develop a Global Standard for a Notification Message of Volcanic Activity by the Volcano Observatory	United States of America
IP/4/10	Ground Based Augmentation System (GBAS) Program Status	United States of America
IP/4/11	Progress of CNS/ATM Implementation in Myanmar	Myanmar
DP/4/12	Optimising Regional and Sub-Regional Collaboration on CNS/ATM Implementation: The Indonesian Automatic Dependant Surveillance – Broadcast (ADS-B) Regional Trial A Template for Collaboration on CNS/ATM Implementation in the Asia Pacific	Indonesia

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<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
IP/4/13	Enhancement of Advanced Surface Movement Guidance & Control System (A-SMGCS) in Singapore	Singapore
IP/4/14	New CNS/ATM Implementation Plan in the Republic of Korea	Republic of Korea
DP/4/15	Asia Pacific Economic Cooperation (APEC) GNSS Implementation Team	Japan
IP/4/16	RNAV Implementation Plan for Japan	Japan
DP/4/17	GNSS Activities in Indonesia	Indonesia
DP/4/18	Preliminary Performance Analysis of the Asia-Pacific Global Navigation Satellite System Testbed	Thailand
DP/4/19	AEROTHAI Aircraft Fleet and Flight Inspection Capability	Thailand
IP/4/20	Terminal Aeronautical GNSS Geodetic Survey Program Update in the Asia Pacific Region	United States of America
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IP/5/6	Enhanced Safety Awareness of Air Traffic Controllers	Hong Kong SAR China
DP/5/7	Repair Station Assessment Tool (RSAT)	United States of America

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IP/5/16	Applying Safety Resources Based on Risk	United States of America
IP/5/17	Controlling Fleet Growth and Managing Used Aircraft	United States of America
IP/5/18	Status of Engineered Materials Arresting System Installations in the United States	United States of America
IP/5/19	Research Activities for Managing Wildlife Hazards to Aircraft	United States of America
IP/5/20	Runway Safety Area Improvements in the United States	United States of America
IP/5/21	Model Aviation Regulatory Document: Law, Regulations, and Implementing Standards and ICAO Endorsed Government Safety Inspector Training to be Conducted on an International Basis	United States of America
IP/5/22	Aircraft Accident Investigation Workshop	United States of America
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IP/6/3	Enhancing Access Control Security through Implementation of Biometrics - Hong Kong International Airport Experience	Hong Kong SAR China
IP/6/4	China's Aviation Security Audit Programme	People's Republic of China

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<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
DP/6/5	China's Experience on Managing Unruly Passengers	People's Republic of China
DP/6/6	Status of Aviation Security Related Activities in Nepal	Nepal
IP/6/7	Review of Developments in Testing, Implementation, and Operational Deployment of Advanced Security Screening Technologies	United States of America
IP/6/8	U.S. Response to the Liquid Explosives Threat, Lessons Learned and Considerations for the Way Forward	United States of America
IP/6/9	Universal Security Audit in Indonesia	Indonesia
IP/6/10	Application of Automated Intrusion System and Biometric Identification System to Enhance Security Level in Gimhae Int'l Airport	Republic of Korea
DP/6/11	Contracting MOU Regarding Deployment of In-Flight Security Officers (IFSOs)	Republic of Korea
IP/6/12	Air Cargo Security	Japan
IP/6/13	Outcomes of the Ministerial Conference on International Transport Security	Japan
DP/6/14	Best Practice "Security Management System"	Thailand
DP/6/15	Carriage of Liquid Duty Free Items by Transfer Passengers in View of Restrictions on Liquids and Gels in Hand Baggage	Singapore
IP/6/16	Development and Implementation of Civil Aviation Security in Vanuatu	Vanuatu
IP/6/17	Aviation Security – Quality Control	France
DP/6/18	August 2006 Aviation Security Alert in the UK	United Kingdom

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<b>REF.</b>	<b>TITLE</b>	<b>PRESENTED BY</b>
<b>AGENDA ITEM 7</b>	<b>AIR TRANSPORT</b>	
IP/7/1	Update on ICAO Activities in the Field of Air Transport	ICAO
DP/7/2	Implementation of Enhanced Travel Documents to Improve Aviation Security	ICAO
IP/7/3	Report on the 13th Meeting of the Asia Pacific Area Traffic Forecasting Group	ICAO
IP/7/4	Progress of China - ASEAN Regional Air Services Arrangement	People's Republic of China
IP/7/5	Status of Development of Air Transport in Myanmar	Myanmar
IP/7/6	Kuala Lumpur International Airport: Meeting the Needs of Low Cost Carriers and New Large Aircraft	Malaysia
IP/7/7	The Potential Use of Alternative Fuels for Aviation	United States of America
IP/7/8	Workshop on the Impacts of Aviation on Climate Change	United States of America
IP/7/9	New Analytical Tools and Approaches to Address Aviation Environmental Impacts	United States of America
IP/7/10	Partnership for Air Transportation Noise and Emissions Reduction (Partner) Center of Excellence Research Activities and International Collaboration	United States of America
IP/7/11	Report on Implementation Status of the Convention on International Civil Aviation Annex 9 (Facilitation)	Republic of Korea
IP/7/12	Report on the Recent Development of Civil Aviation in the Republic Of Korea	Republic of Korea
DP/7/13	Ownership and Control Liberalisation: A Discussion Paper	United Kingdom
IP/7/14	Development of Indonesia's Air Transport Industry and Policy	Indonesia
DP/7/15	Managing the Environmental Challenges of Air Transportation	IATA
IP/7/16	Some New Provisions Relating to Air Transport Regulation and Airport Management Covered by the 2006 Law on Civil Aviation of Viet Nam	Viet Nam

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REF.	TITLE	PRESENTED BY
<b>AGENDA ITEM 8</b>	<b>TECHNICAL COOPERATION</b>	
DP/8/1	ICAO Technical Co-operation Programme Interventions in Asia and Pacific Regions	ICAO
DP/8/2	ICAO Regional Programmes in Asia and Pacific Regions	ICAO
DP/8/3	Co-operative Arrangement for the Prevention of Spread of Communicable Diseases through Air Travel (CAPSCA)	ICAO
IP/8/4	China's Support to at the Cooperative Development of Operational Safety & Continuing Airworthiness Programme – North Asia (COSCAP – NA) of ICAO	People's Republic of China
DP/8/5	The Republic of Korea – ICAO Fellowship Training Programme for Developing Countries	Republic of Korea
<b>AGENDA ITEM 9</b>	<b>OTHER BUSINESS</b>	
	<b><i>A Theme Topic for the 44<sup>th</sup> Conference of DGCA's</i></b>	
DP/9A/1	Possible Theme Topic for the 44 <sup>th</sup> Session of the Conference – 2007	ICAO
	<b><i>B Endorsement of Action Items arising from the Present Conference</i></b>	
DP/9B/1	List of Action Items arising from the Present Conference	ICAO
	<b><i>C Any other Matters</i></b>	
DP/9C/1	Schedule of Meetings/Seminars/Workshops to be Convened in 2007 by the ICAO Asia and Pacific Office	ICAO
DP/9C/2	Schedule of Conferences of Directors General of Civil Aviation, Asia and Pacific Regions in the foreseeable future	ICAO
IP/9C/3	Enhancing Efficiency of Communications and Meetings	ICAO

43<sup>rd</sup> Conference of Directors General of Civil Aviation  
Asia and Pacific Regions

# **ATTACHMENTS**

Bali, Indonesia: 4 to 8 December 2006



## GOVERNOR OF BALI

WELCOME SPEECH BY GOVERNOR OF BALI  
ON THE 43<sup>RD</sup> CONFERENCE OF DIRECTORS  
GENERAL OF CIVIL AVIATION, ASIA PACIFIC  
REGION, 4<sup>TH</sup> DECEMBER 2006, WESTIN  
RESORT, NUSA DUA BALI

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- ❖ Honorable Minister of Transportation of Republic of Indonesia
- ❖ Director General of Civil Aviations
- ❖ Directors General of Civil Aviations of Foreign Countries
- ❖ The Chief of International Civil Aviations
- ❖ Distinguished Guest, Ladies and Gentlemen.

**OM SWASTIASTU**

First of all, let us pray to The Almighty God for His blessing, we could gather here in safe and good condition to attend this event of "The 43<sup>rd</sup> Conference of Directors General of Civil Aviation, Asia Pacific region".

On behalf of Provincial Government and people of Bali, may I convey my warmest welcome to all of you and our grateful feeling to the organizing committee for choosing Bali to be a venue for this international meeting. I do hope the safe and comfortable condition in Bali will support you have a fruitful conference.

**Ladies and Gentlemen,**

I am very glad that this conference is one of a prospectus effort for development in Bali as this island is one of a tourist destination. A good tourism needs a safe, convenient, and good transportation as a supporting sector to bring tourists come to Bali.

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**Ladies and Gentlemen,**

I do hope many more national and international events will choose Bali as the venue of the events. I am sure; it will be a good promotion for Bali tourism and will help Bali to recover its economy and tourism.

**Ladies and Gentlemen,**

Finally, we wish this conference will run smoothly and bring positive result for the development of Civil Aviation in Asia Pacific region. At the same time it will be a provident that Bali is still the right choice to be visited. At last, have a nice stay in Bali and enjoy our unique culture and beautiful nature.

Thank You.

**OM SHANTI, SHANTI, SHANTI, OM**



**REMARKS BY THE REGIONAL DIRECTOR  
ICAO ASIA AND PACIFIC OFFICE  
MR. LALIT B. SHAH  
TO THE 43<sup>RD</sup> CONFERENCE OF  
DIRECTORS GENERAL OF CIVIL AVIATION,  
ASIA AND PACIFIC REGIONS**

Your Excellency, Mr. Hatta Rajasa,  
Minister of Transportation of the Republic of Indonesia,

Honourable Vice-Governor of Bali Province  
Ministers, Vice Ministers, Secretaries,  
Esteemed Director General of Civil Aviation  
And our kind host, Mr. Iksan Tatang,

Fellow Directors General, Chief Executives,  
Leaders of the Industry,  
Distinguished Guests,  
Ladies and Gentlemen,

It is a great honour and pleasure for me to be here amidst this distinguished gathering on the occasion of the 43<sup>rd</sup> Conference of Directors General of Civil Aviation, Asia/Pacific Region and to be representing the President of Council of ICAO, Mr. Roberto Kobeh González, and the Secretary General, Dr. Taïeb Chérif.

I am deeply honoured to be with you and please accept my gratitude. I also have the pleasure of conveying the best personal wishes of the President and the Secretary General to Your Excellency, the Minister, Director General Iksan Tatang, and to all the colleagues gathered here.

Mr. Minister, we wish to thank you very much for your personal presence here and for gracing the opening of this important annual event in the Region. We thank the Governor for your warm words of welcome and for the hospitality that has been extended to us in this exotic province of Bali.

Both the President of Council of ICAO and the Secretary General have asked me to convey their sincere apologies for their inability to attend this Conference. They have sent a joint message. I now have the honour of reading to you the joint message:

**“It is a great pleasure and honour for us to be able to convey a message to all the distinguished participants of the 43<sup>rd</sup> Conference of Directors General of Civil Aviation, Asia and Pacific Regions.**

As we extend to you the warm greetings of the Council and the ICAO Secretariat, please also accept our regrets for not being able to personally attend this important annual event due to our commitments with the ongoing Council session.

The annual Conference of Directors General is considered to be a unique forum which continues to serve the Asia/Pacific Region very well.

We have noted with great interest the theme you have chosen for the 43<sup>rd</sup> Conference: "Sustainable Practices for enhanced safety oversight and security". Safety and security continue to occupy the highest priorities in ICAO as they are Strategic Objectives A and B of the Organization. In this regard, you may recall that the Council of ICAO approved "Safety and Security – first and always the top priority" as the theme for this year's worldwide celebration of International Civil Aviation Day on 7 December 2006 and throughout the year 2007.

Thus, your discussions during the Conference will, most assuredly, focus on the various sub-regional mechanisms you have put in place for enhancing safety and security on a cooperative basis.

The Asia/Pacific Region is very diverse and ICAO commends the high degree of collaboration that continues to be demonstrated in all of your regional activities. We recognize the value of your annual Conference of Directors General of Civil Aviation in this regard and its singular role in enhancing and fostering a strong sense of cooperation in the Region.

We are also pleased to inform you that the Air Navigation Commission and the Council are fully aware of the excellent work that continues to be carried out by APANPIRG. We are very pleased to note the confidence you place in the coordinating leadership role of the Asia/Pacific Regional Office and ask you to continue to relate your civil aviation activities and programmes with ICAO through the Regional Office in order to ensure harmonious and orderly growth.

Both of us, in our capacity as President of the Council and as Secretary General of ICAO, again, thank you and particularly the Ministry of Transportation for kindly hosting this event.

We wish you every success in the 43<sup>rd</sup> Conference and look forward to personally being with you for the 44<sup>th</sup> Conference."

It is very gratifying to note the acknowledgement made by the President and the Secretary General in accepting the unique value of the Annual Conference of the Directors General and the high degree of collaboration and cooperation that prevails in the Region.

The joint message also acknowledges the work of the Regional Planning and Implementation Body, APANPIRG and draws our attention to the continued need of relating all of our civil aviation activities to ICAO and the Regional Office for ensuring harmonious growth in this diverse Region.

Ladies and Gentlemen, allow me now to turn to the specific Asia/Pacific perspective.

With more than 13,700 islands and as the world's fourth most populous country, Indonesia carries a great variety of flora than the tropical regions of Africa or the Americas.

With 40,000 species of flowering plants, including 3000 trees and 5000 orchids, including the tiger orchid; with a fine blending of traditional theatrical and musical forms, such as shadow puppets and gamelan orchestras; Indonesia truly is a nation of the most varied and picturesque mosaic.

It feels so good to be back in Indonesia with the 43<sup>rd</sup> Conference of Directors General of Civil Aviation.

The 10<sup>th</sup> Conference was held in Bali in 1972, the 15<sup>th</sup> in Denpasar in 1983, the 32<sup>nd</sup> in Jakarta in 1996 and now we are in Bali, Indonesia again for the fourth time.

We owe the Government of Indonesia a great deal for making the 43<sup>rd</sup> Conference happen at such a short notice. As all of us know, we were looking forward to the event taking place in Sri Lanka. However, due to circumstances beyond the control of our good colleague, Director General Nimalsiri, an alternate venue had to be explored. When I was in Indonesia in the month of May, you may recall, Your Excellency, that I broached the subject with the Director General and your goodself. And you very kindly agreed to consider the possibility provided a final decision was conveyed by June. This came as a big relief to us and in the meantime, after closely coordinating with Sri Lanka, an official request was sent to DG of Indonesia, Mr. Tatang.

I am sure all of the Colleagues from the Asia/Pacific Region will be more than happy to join me in thanking Director General Tatang for rescuing the 43<sup>rd</sup> Conference and also in empathizing with Director General Nimalsiri, fully understanding your special circumstances and difficulties. All in all, this goes to demonstrate the true value of understanding and cooperation amongst the Directors General of Asia/Pacific Region.

In its long history from the first Conference in Manila, Philippines in 1960, up till now in 2006, we have had only 5 years of break. From 1978, the 14<sup>th</sup> Conference held in Kathmandu, Nepal, there have been no breaks and very

interestingly, in the year 2000, we had two conferences, the 36<sup>th</sup> and the 37<sup>th</sup> in the same year.

From this 43<sup>rd</sup> Conference, it is a smooth sailing through China, Malaysia, Japan, Macao, China; New Caledonia, France; right up to the 49<sup>th</sup> Conference in Maldives in 2012.

The 50<sup>th</sup> Conference, symbolic in its number and age, will be kept close to ICAO Regional Office for Asia/Pacific Region.

This Annual Conference has already established a historical legitimacy of well over 42 years and by keeping the bureaucratic shackle on the side lines, has transformed into a group which can truly boast of striking a balance combining informality, ease and commitment to our work.

I view this forum as being unique, both in its representation and scope. This Conference has a personality of its own – it must be kept that way. The Asia/Pacific Region cannot afford to see the erosion of this forum, let alone its disintegration. This is the sole legitimate forum that is truly representative of all 36 States of the Asia/Pacific Region.

The prevalence of a strong spirit of cooperation is very evident in the Region and I thank all the Directors General and the Representatives of International Organizations for their continuing support to this sense of core cooperation. It is a central element on which ICAO relies totally for all its undertakings.

I say this all the time and say it again now. From 1978, when I was first associated with this event, I have reiterated my strong conviction in the values of cooperation and collaboration that are instilled in the annual event. I have seen the Annual Conference grow in its maturity, in its depth of debate and its scope and range of issues that are addressed.

And in this process, ICAO Regional Office has found a place in the collective heart of the Asia/Pacific Region. It has been a privilege to be associated with and to be able to serve this forum. The Regional Office will continue to do so.

Your Excellency, you have done much honour and lent much significance and grace to this event with your kind presence.

To you, Director General Tatang, we express our sincere appreciation and thanks for rescuing the 43<sup>rd</sup> Conference.

After having been rescued, the event takes on more significance and therefore it is incumbent upon us to make the 43<sup>rd</sup> Conference very special.

I am sure, all of us will contribute accordingly.

I thank you and God bless.

OPENING SPEECH  
BY  
MINISTER FOR TRANSPORTATION OF THE REPUBLIC OF INDONESIA  
ON THE OCCASION OF  
THE 43<sup>RD</sup> CONFERENCE OF DIRECTOR GENERAL OF CIVIL AVIATION,  
ASIA PACIFIC REGIONS

BALI - INDONESIA, 4 DECEMBER 2006

His Excellency Mr. Lalith B. Shah, Director of ICAO Regional Office,  
Bangkok,

His Excellency Mr. IGN Alit Kalakan, Vice Governor of Bali Province,  
Distinguished Director General of Civil Aviation in Asia and the Pacific,  
Distinguished delegates and guests,  
Ladies and gentlemen,

It is indeed a great pleasure for me today, to be present among distinguished director generals of the civil aviation of Asia and the Pacific region, in this auspicious occasion of the forty third Conference of Director General of Civil Aviation, Asia and the Pacific region, held in Bali-Indonesia on the fourth till eighth of December 2006.

First of all, on behalf of the Government of the Republic of Indonesia, allow me to convey my warmest welcome to all of you to this conference. I wish you a pleasant and most memorable stay in this Paradise Island of Bali. While you stay here, I hope that you all be able to explore the breathtaking beautiful nature of Bali as well as experiencing its unique cultural tradition.

It is our distinct honour and privilege that Indonesia once again, could host this very important meeting of Civil Aviation's Director General of Asia-Pacific Region. For your kind information, it is the fourth time for Indonesia to host this important forum, in which the last meeting of DGCA of Asia-Pacific Region was held in Indonesia 10 years ago, in the year of 1996.

I am full confidence that this meeting would become a significant forum in promoting intra-regional cooperation and coordination in the civil aviation sector. As it was agreed at the forty second conference, that the theme for this year conference is "sustainable practice for enhanced safety oversight and security". I am sure that all of you would not hesitate with the theme and its substance, as this is both challenging and

crucial for determining the competitiveness of air transport industry these days.

**Ladies and Gentlemen, distinguished guests,**

In a global economy, where it is getting easier to move peoples, goods and services around the world, air transport has become an important part of supply chain execution in economy growth, and it has various modes along with many complex activities, by which safety and security are the two most important aspects.

As the world is getting more and more connected, air transport business has spanned to a more liberalized dimension. This trend can be seen easily. If, for example, we fly from any ASEAN nation to Asia, or from Asia to Europe or to the rest of the world, chances are good that if we pick a country anywhere in the world, we can match it with a single-one dominant airline, which is generally, a state-owned airline.

But as the world is getting global, many barriers come down, and competition heats up, cross borders mergers have become fair game for many airlines, it is no wonder that efficiency and effectiveness garner attention in air transport industry. And maintaining both effectiveness and efficiency in the safety and security has become the parameter of competitiveness in any air transport industry.

Ladies and gentlemen, distinguished guests,

In terms of security and safety, the world's air transport industry is now faced by two global agenda. These are **Standardization** and **Systematics Building**.

Standardization in safety and security has become a global agenda as a logical consequence of an aggressive liberalization of air transport industry. Standardization would be focused on the more strategic optimization of competitiveness through the design implementation and continuous improvement. All of these have to be coupled by careful diagnosis of current designed systems, capabilities and processes. Therefore we cannot limit ourselves on the advancement of safety and security instruments, but we need to improve the safety and security management systems as well as manpower development.

Moreover, standardization in safety and security is ultimately important in the emerging liberalization of air transport businesses. With the ever growing demand on air transport services worldwide, standardized in safety and security are complex but critical issues. Complex in term of

many factors dealing with them, and critical as both are the only parameter that would determine the performance of any airline in the world.

The systematic building on safety and security in air transport means that it is imperative to combine all aspects in air transport in a concerted effort in order to provide more holistic solutions to all matters related to safety and security. Systematic building would require us to build a comprehensive and global strategy for improving aviation safety and security.

Ladies and gentlemen, distinguished guests,

Please allow me to report, the current status and progress of our aviation development with regard to the two global agenda on aviation safety and security.

I am delighted to inform you that in term of standardization, the recent conducted reports from internationally approved agency from ICAO have confirmed that current situation of infrastructures, regulations and systems in Indonesian civil aviation are significantly improved. And we are working on improving standards of human resource capability and performance which both would be increased to comply with the global standards.

In term of systematic building, I would like to report that some minister decrees have been declared. One of the most important is dealing with specific requirement on serviceability of commercial aircrafts. These minister decrees would strive to systematically improve the safety level of any serviceable aircraft in Indonesian sky.

It is my solemn obligation to highly concerned in making all efforts in order to ensure the fulfillment of Indonesian aviation to the two global agendas on air transport industry.

Excellencies,  
Ladies and gentlemen,

As my final remark, I would like to wish you a very fruitful and constructive discussion. And please allow me to recommend special attention on discussions, dealing with standardization and systematic building on safety and security, as both have become global agenda on air transport industry. Last but not least, I wish an all the best and may this conference would produce a set of implementing actions that should be

taken by all participants in order to improve and enhance our safety and security standards.

Finally let us reiterate our commitment that **“the sky is a vast place but there is no room for error”**. With that credo, *I declare the forty third Conference of Directors General of Civil Aviation is officially open*. May the Almighty God bestow our Endeavour to realize civil aviation safety oversight and security.

Thank you.

MINISTER FOR TRANSPORTATION

M. HATTA RAJASA