

*INTERNATIONAL CIVIL AVIATION ORGANIZATION***TWENTY-SECOND MEETING OF THE
ASIA/PACIFIC AIR NAVIGATION PLANNING AND
IMPLEMENTATION REGIONAL GROUP (APANPIRG/22)***Bangkok, Thailand, 5-9 September 2011***Agenda Item 1: Follow up on the outcome of APANPIRG/21 Meeting
1.1****REVIEW OF THE ACTIONS OF THE AIR NAVIGATION COMMISSION
ON THE REPORT OF THE 21ST MEETING OF THE ASIA/PAC AIR
NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP
(APANPIRG/21)**

(Presented by the Secretariat)

SUMMARY

This paper presents the action taken by the Air Navigation Commission on the report of the Twenty-First Meeting of APANPIRG.

Action by APANPIRG/22 is in paragraph 3.

This working paper relates to Strategic Objective A.

1. INTRODUCTION

1.1 Following each APANPIRG Meeting, the report is first reviewed by the working group of the Air Navigation Commission (ANC) followed by the ANC itself and finally by the Council, if required. During these reviews, the ANC note the report, make comments thereon and provide guidance to the APANPIRG as appropriate. Furthermore, the ANC may take specific action on certain conclusions contained therein, since the follow-up to some conclusions may require approval by the ANC. Follow-up actions by the ICAO Secretariat on the conclusions of the APANPIRG are then guided by the outcome of the ANC actions described above.

1.2 This working paper informs APANPIRG of the results of the actions taken by the Commission on the report of the APANPIRG/21 Meeting, which was held in Bangkok from 6 to 10 September 2010. **Appendix A** to this working paper presents the executive summary of the outcome of the APANPIRG/21 Meeting. The analysis of the conclusions is at **Appendix B**. Action by the Commission on selected conclusions is outlined in the **Appendix C**, which has been formatted to link the conclusions with the 2005-2010 Strategic Objectives of the Organization which were in place at the time of the meeting.

2. ACTION BY THE AIR NAVIGATION COMMISSION ON THE APANPIRG/21 REPORT

2.1 The Commission referred the APANPIRG/21 Report to its Working Group for Strategic Review and Planning (WG/SRP) for a detailed review. The review was carried out on 30 November 2010, following which the Commission itself reviewed the APANPIRG/21 Report on 10 March 2011.

2.2 The Commission noted the APANPIRG/21 Report and took specific action on certain conclusions therein, as shown in **Appendix C** to this working paper. In the case of the APANPIRG/21 Report, as there were no specific items that required Council action, the said report was not submitted to the Council. The following are highlights of the review by the Commission.

2.3 Air Traffic Management (Agenda Item 3.2)

2.3.1 *States air navigation modernization plans:* The Commission queried why States should share its plans with ICAO for review and assessment, which implied that there also is a requirement for an ICAO approval of the plans (Conclusion 21/1 refers). The Secretariat responded that an approval was not intended but that it helped ICAO in the development of provisions and in providing assistance to States. The Commission nevertheless requested the Secretariat to provide details of the procedures and actions involved.

2.3.2 *Performance framework:* The Commission concurred with the view of APANPIRG in Conclusion 21/3 on the need to have a common set of performance metrics for all the ICAO Regions and requested the Secretariat to complete the task along with guidance for the collection of data by September 2011.

2.3.3 *Volcanic ash contingency plan:* Noting Decision 21/9, the Commission encouraged APANPIRG to expedite the development of a volcanic ash regional contingency plan in coordination with all parties concerned.

2.3.4 *Transfer FASID Table ATS 2 from ATS to MET:* With regard to Conclusion 21/10, the Commission welcomed the initiative of APANPIRG and requested the Secretariat to review and consider the transfer of FASID Table ATS 2, HF radiotelephony VOLMET from the ATS part to the MET part of all ANP/FASID, where applicable, as a part of the overall exercise for converting paper-based ANPs into eANPs.

2.3.5 *Implementation of the NEW Flight Plan Format:* Confirming the request of APANPIRG in Conclusion 21/14, the Commission requested the Secretariat to continue to monitor the implementation status of every State in the ICAO Flight Plan Implementation Tracking System (FITS) Portal and ensure global harmonization for a coordinated transition to the NEW Flight Plan. The Commission commented that, in view of any difficulties States may be encountering, the Secretariat could consider providing guidance on a phased approach.

2.4 Communications/Navigation/Surveillance (Agenda Item 3.4)

2.4.1 *ATN using IPS protocols:* The Commission noted Conclusion 21/17 and called upon the Secretariat to provide clarification on the issues related to the Aeronautical Telecommunication Network/Air Traffic Services (ATS) Message Handling System (ATN/AMHS) implementation. Also, responding to a request in Conclusion 21/22 regarding the global IPv6 addressing scheme, the Commission requested the Secretary General to include this task in the work programme so as to develop SARPs for a global IPv6 addressing scheme for ground-ground communications.

2.4.2 *PBN provisions:* The Commission, noting Conclusion 21/30, requested the Secretariat to develop guidance supplementing existing PANS provisions regarding limitation of older generation flight management system (FMS). Discussing further on the subject of performance-based navigation (PBN), the Commission recognized that there were many other significant issues that impacted on the implementation of PBN, many of which were associated with different objectives. In this respect, while PBN is a worthy cause, a reality check was needed and the probability of widespread implementation was unlikely in the near to medium term. The Commission did, however, agree that the development of guidance on aircraft equipage requirements for required navigation performance (RNP) value of 0.3 or greater (Conclusion 21/33 refers) may be of some use, if only to highlight the limitations.

2.4.3 *PBN Implementation:* With regard to the implementation of PBN, the Commission noted that APANPIRG had reviewed and updated the regional plan. The Commission noted the slow progress of PBN implementation in the region (see also paragraph 2.3.2 above) and welcomed any initiative that would encourage greater progress (Conclusions 21/31, 21/32 and 21/35 refer).

2.4.4 *Protection of the aeronautical frequency spectrum:* On the subject of preparations for the forthcoming International Telecommunication Union (ITU) World Radiocommunication Conference 2012 (WRC-2012), the Commission appreciated the ongoing contribution of APANPIRG in addressing this issue in a number of forums, such as meetings of Director Generals of Civil Aviation and Asia-Pacific Telecommunity (APT) Regional Preparatory Meetings. As the frequency bands allocated to aviation use are highly attractive to commercial users, the Commission reiterated the need for the civil aviation community to remain vigilant in safeguarding aeronautical interests. In this connection, the Commission noted Conclusion 21/43 and request the Secretary General to urge States to continue to participate at various levels in different forums to provide support to the ICAO position. Continuing deliberations, the Commission confirmed the need to display the ICAO position for WRC-2012 on the home page of the ICAO website (Conclusion 21/44 refers).

2.5 **Aeronautical Meteorology (Agenda Item 3.4)**

2.5.1 *MET/ATM Seminar:* The Commission, concurring with the request of APANPIRG in Conclusion 21/50, requested the Secretariat to conduct a MET/ATM Seminar, in coordination with WMO, in early 2011.

2.6 **Regional Air Navigation Deficiencies (Agenda Item 4)**

2.6.1 *Addressing deficiencies:* Regarding deficiencies, the Commission noted that APANPIRG had reviewed, analysed and prioritized the list of air navigation deficiencies (Conclusions 21/53, 21/54 and 21/55 refer). The Commission invited the Secretary General to accord highest priority in its work programme to the urgent elimination of the safety-related deficiencies and the States reflected in the APANPIRG list of deficiencies be urged to establish action plans with fixed target dates. Also, commitment to the elimination of deficiencies should be pursued through all available mechanisms, including the annual meeting of Director Generals of Civil Aviation.

2.6.2 *Cost recovery guidance material:* The Commission noted Conclusion 21/56 and requested the Secretariat to coordinate with the Air Navigation Services Economics Panel (ANSEP) and World Meteorological Organization (WMO) and consider, if necessary, updating guidance material in the *Manual on Air Navigation Services Economics* (Doc 9161).

2.6.3 *Establishment of RASGs – Consequent revision to TOR of APANPIRG:* This item highlighted the need for the Commission to consider how the reports and actions resulting from RASG Meetings will be handled. It is probable that the process (es) will be identical to that associated with PIRGs (Conclusion 21/58 refers).

2.6.4 *Review of Regional ANPs:* With regard to Conclusion 21/59 calling on ICAO to review the regional air navigation plan structure, process and contents to incorporate them into eANP and expedite its provision for use, the Commission was apprised that the task is in hand and that eANPs will be available by November 2012.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the action taken by the Commission on the APANPIRG/21 Report, as outlined in this working paper and, in particular, to Appendix C hereto; and
- b) include the follow-up actions in the work programme of APANPIRG.

APPENDIX A

**THE TWENTY-FIRST MEETING OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING
AND IMPLEMENTATION REGIONAL GROUP (APANPIRG/21)
Bangkok, Thailand, 6-10 September 2010**

EXECUTIVE SUMMARY

1. Attended by 114 participants from twenty-three States and three international organizations.
 2. ICAO was invited to develop a common set of performance metrics for all ICAO regions so as to facilitate comparative analysis of regional developments of air navigation infrastructure.
 3. Developed the Asia/Pacific Guidance Material for the Implementation of Amendment 1 to the fifteenth edition of the *Procedures for Air Navigation Services – Air Traffic Management*. Called on ICAO to continue with interregional coordination for ensuring implementation of a new flight plan format by 15 November 2012.
 4. The China RMA has been approved as an Asia/Pacific RVSM Regional Monitoring Agency (RMA) with responsibility for all RVSM airspace in China FIRs and the Pyongyang FIR.
 5. Adopted a revised strategy for implementation of ATN in the Asia/Pacific Region.
 6. ICAO to consider a global IPv6 addressing scheme for ground-ground communication.
 7. States which have not developed their State PBN Implementation Plans were urged to develop their plans in accordance with the Asia/Pacific Regional PBN Implementation Plan. ICAO to consider establishing regional development and implementation teams, similar to ICAO/IATA global GO teams, to assist States in expediting PBN implementation. ICAO to highlight the slow progress and impediments in PBN implementation at the 47 DGCA Conference.
 8. The revised regional surveillance strategy for Asia and Pacific Regions was adopted.
 9. States were urged to support the ICAO position at WRC–2012. ICAO was requested to improve visibility to its position on WRC–2012 agenda items on the ICAO website.
 10. The ISCS Provider State, in cooperation with ICAO Headquarters and the Asia and Pacific Regional Office, to work with other States to assist with the implementation of the World Area Forecast System File Service (WIFS) by March 2012.
 11. ICAO to consider updating the cost recovery guidance material that would take into account States where air traffic volume is not sufficient in terms of cost recovery for the necessary MET services.
 12. Agreed to continue to consider environmental issues in the planning and implementation of regional air navigation systems.
 13. As a result of the establishment of the regional air navigation safety group RASG–APAC, adopted the revised terms of reference of APANPIRG.
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APPENDIX B

TWENTY-FIRST MEETING OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (APANPIRG/21)

APANPIRG CONCLUSIONS/DECISIONS

AN ANALYSIS

1. The APANPIRG/21 Meeting developed a total of 59 outputs, comprising 49 conclusions and 10 decisions. These 59 outputs can be categorized into two levels of actions. The first level (48 outputs), known as “implementations plans”, calls for action by Headquarters, the Regional Office, States and APANPIRG itself and results in activities that support the implementation of air navigation systems. The second level (11 outputs: Conclusions 21/3, 21/10, 21/14, 21/17, 21/22, 21/30, 21/33, 21/44, 21/50, 21/56 and 21/59), known as “implementation gaps”, calls for action specifically by Headquarters and results in activities involving further development of requisite provisions and/or guidance material.
2. Out of 59 outputs, 22 and one paragraph have been suggested for specific review by the ANC and are detailed in the Action Plan in Appendix C hereto. For ease of reference associated outputs (conclusions/decisions), if any, are also shown in the Action Plan. The selection criteria for the 23 outputs for review by the ANC reflect, inter alia, key regional implementation issues, call for interregional harmonization, and refer to ICAO global programmes or request specific action by ICAO Headquarters.
3. With regard to the conclusions and decisions of the meeting which are not reflected in the Action Plan, follow-up action will be taken by the Secretary General in accordance with established practice. Each entry in the Action Plan is linked to the 2005-2010 Strategic Objectives of the Organization which were in place at the time of the meeting.

APPENDIX C

Implementation of select conclusions/decisions of APANPIRG/21 Meeting
— Action Plan —

Concl/Dec No. --- Strategic Objective*	Title of Conclusion	Text of Conclusion	Responsibility	Deliverable	Action Agreed by ANC on 10 March 2011 (ANC 186-7)	Reporting/Completion date
C 21/1 D	States' air navigation modernization plans	That, States developing their national air navigation modernization plans which may have an impact on ICAO SARPs, be urged to share those plans in a timely manner with ICAO for review and assessment, to ensure global compatibility and harmonization.	ICAO APAC Office ICAO HQ/ ANB/CNS	State letter Established procedures	Noted. Requested the Secretariat to provide more details on the established procedures for the harmonization of these modernization plans.	Completed Completed
C 21/3 D	Common Set of Performance Metrics for all the ICAO Regions	That, ICAO be invited to: a) develop a common set of performance metrics for all the ICAO regions so as to facilitate comparative analysis; and b) establish the globally harmonised guidance on methodology of how to collect the data in order to achieve commonality.	ICAO HQ/ ANB	A common set of performance metrics for all ICAO regions including guidance material for collection of data.	Supported the conclusion and requested the Secretariat to develop a common set of metrics applicable to all regions along with guidance for the collection of data.	September 2011

Concl/Dec No. --- Strategic Objective*	Title of Conclusion	Text of Conclusion	Responsibility	Deliverable	Action Agreed by ANC on 10 March 2011 (ANC 186-7)	Reporting/Completion date
C 21/10 D	Transfer FASID Table ATS 2 from ATS to MET	That, ICAO considers the transfer of FASID Table ATS 2, HF radiotelephony VOLMET broadcasts, from ATS to MET, which would involve moving the Tables related to VOLMET broadcasts from the ATS part to the MET part of all ANP/FASID, where applicable.	ICAO HQ/ ANB/SAST	Review of FASID. Modifications, if any, to be incorporated in eANP	Noted and requested the Secretariat to review as a part of overall exercise for converting all paper based ANPs to eANPs.	November 2012
C 21/14 + associated C 21/13 D	Enhancement of the Global Coordination for Implementation of the NEW Flight Plan Format	That, in light of the varying degree of States in implementing the NEW flight plan format, ICAO: i) urge all the States, including those outside the Asia/Pacific Region, to record their readiness in the FITS; ii) take action to ensure that any States or ICAO regions not use non-standard local procedures; and iii) ensure appropriate coordination take place between ICAO regional planning and implementation groups (PIRGs) to address implementation issues.	ICAO HQ/ ANB/ATM	Global harmonization through monitoring of implementation status on ICAO FITS portal.	Noted and requested the Secretariat to continue to monitor the implementation status of every State on ICAO FITS portal and ensure global harmonization for a transition to NEW Flight Plan.	November 2012
C 21/15 A	Responsibility Area of China RMA	That, the China RMA be approved as an APANPIRG Asia/Pacific RVSM Regional Monitoring Agency with responsibility for all RVSM airspaces in China FIRs, and the Pyongyang FIR.	ICAO APAC Office	State letter to China and MAAR	Noted.	Completed

Concl/Dec No. --- Strategic Objective*	Title of Conclusion	Text of Conclusion	Responsibility	Deliverable	Action Agreed by ANC on 10 March 2011 (ANC 186-7)	Reporting/Completion date
Paragraph 3.3.49 A	Use of the revised MMR in LTHM for the region	RASMAG decided that the revised MMR agreed by RMACG/5 would remain as the basis for the maintenance of LTHM requirements in the Asia/Pacific region after November 2010.	ICAO APAC Office	Revised MMR for LTHM for the ASIA/PAC Region	Noted.	Completed
C 21/17 D	ICAO <i>Manual on the ATN using IPS Standard Protocol (Doc 9896)</i> clarifications	That ICAO be invited to provide clarifications on the following issues related to ATN/AMHS implementation: i) VoIP should be limited to ATS ground service since the ICAO approach is to encourage data communication such as CPDLC for air-ground communication. Furthermore, the VoIP performance is network dependent and thus performance acceptance is varied; ii) how the States will come to know about updates on the relevant RFCs; and iii) IPv6 address structure.	ICAO HQ/ ANB/CNS	SARPs related to ATN/AMHS implementation	Noted and requested the Secretariat to provide clarifications on the issues related to ATN/AMHS implementation.	2012

Concl/Dec No. --- Strategic Objective*	Title of Conclusion	Text of Conclusion	Responsibility	Deliverable	Action Agreed by ANC on 10 March 2011 (ANC 186-7)	Reporting/ Completion date
C 21/30 D	Limitation of Older Generation FMS	That, ICAO (IFPP, PBNSG) be invited to note once again the importance of the limitation of older generation FMS in storing multiple procedures for the same type of navigation system for a runway. This limitation occurs when pilots attempt to select a specific approach that is not stored in the FMS navigation database. ICAO is requested to consider establishing additional guidance, supplementing existing PANS provisions and to explore solution(s).	ICAO HQ/ ANB/ATM	Additional guidance supplementing existing PANS provisions regarding limitation of older generation FMS	Noted and requested the Secretariat to develop guidance supplementing existing PANS provisions regarding limitation of older generation FMS.	2012
C 21/31 + associated C 21/32 and C 21/35 D	Revised APAC Regional PBN Implementation Plan	That, the revised APAC Regional PBN Implementation Plan Version 2.0 provided in Appendix M to the Report on Agenda Item 3.4 be adopted.	ICAO APAC Office; and ICAO HQ/ ANB/ATM	Revised APAC Regional PBN Implementation Plan	Noted the delay in implementation of PBN and requested the Secretariat to consider what can be done to encourage greater progress.	Ongoing
C 21/33 D	Aircraft Equipage Requirements	That, ICAO provides guidance on aircraft that do not have a lateral and vertical readout on the navigation display, but do display the lateral and vertical profile on the navigation equipment, which could be considered as an alternate means of compliance, if supplemented by appropriate flight crew training for RNP value of 0.3 RNP or greater.	ICAO HQ/ ANB/ATM	Guidance on aircraft equipage requirements for RNP value of 0.3 or greater	Noted and requested the Secretariat to develop guidance on aircraft equipage requirements for RNP value of 0.3 or greater and rationalize the guidance material.	2012

Concl/Dec No. --- Strategic Objective*	Title of Conclusion	Text of Conclusion	Responsibility	Deliverable	Action Agreed by ANC on 10 March 2011 (ANC 186-7)	Reporting/Completion date
C 21/40 + associated C 21/39 D	Guidelines for Airworthiness and Operational Approval for ADS-B Avionics Equipage	That, States be advised to use the guidelines provided in Appendix P to the Report on Agenda Item 3.4 for Airworthiness and Operational Approval for ADS-B Out Avionics Equipage.	ICAO APAC Office	Guidelines for airworthiness and operational approval for ADS-B Out avionics equipage	Noted.	Completed
C 21/41 + associated C 21/36 D	Revised Regional Surveillance Strategy for Asia and Pacific Regions	That, the revised Regional surveillance strategy for Asia and Pacific Regions provided in Appendix Q to the Report be adopted.	ICAO APAC Office	Revised regional surveillance strategy	Noted .	Completed

Concl/Dec No. --- Strategic Objective*	Title of Conclusion	Text of Conclusion	Responsibility	Deliverable	Action Agreed by ANC on 10 March 2011 (ANC 186-7)	Reporting/ Completion date
<p>C 21/43 D</p>	<p>Preparation for WRC – 2012</p>	<p>That, a) States be urged to have the designated contact person closely involved in the preparatory work for WRC – 2012 at the national level in close coordination with the contact points designated by respective telecommunication regulators; b) make necessary arrangements for the designated contact persons to attend the APT APG meetings and WRC – 2012 Conference to protect aviation interests; and c) reference to APANPIRG Conclusions 19/41, 20/58 and DGCA Conference Action Item 46/8 may be used to support these efforts.</p>	<p>ICAO APAC Office</p>	<p>States support to ICAO position at WRC 2012</p>	<p>Noted and appreciated the preparatory work of APANPIRG in order to seek the support of States for ICAO position at WRC-2012.</p>	<p>January 2012</p>
<p>C 21/44 D</p>	<p>Visibility of ICAO Position on WRC – 2012 Agenda Items</p>	<p>That, ICAO be urged to improve visibility to ICAO Position on WRC-2012 Agenda Items of critical interest to civil aviation on the ICAO website.</p>	<p>ICAO HQ/ ANB/CNS</p>	<p>Increased visibility of ICAO position for WRC-2012 on ICAO website by displaying it on home page.</p>	<p>Agreed and requested the Secretariat to display ICAO position for WRC-2012 on the home page of ICAO website.</p>	<p>Completed</p>
<p>C 21/50 D</p>	<p>MET/ATM Seminar</p>	<p>That, ICAO in coordination with WMO conduct a MET/ATM Seminar in early 2011.</p>	<p>ICAO HQ/ ANB/MET</p>	<p>MET/ATM seminar was held in January 2011.</p>	<p>Noted and confirmed the need for MET/ATM Seminar in early 2011</p>	<p>Completed</p>

Concl/Dec No. --- Strategic Objective*	Title of Conclusion	Text of Conclusion	Responsibility	Deliverable	Action Agreed by ANC on 10 March 2011 (ANC 186-7)	Reporting/Completion date
C 21/53 + associated C 21/54 and C 21/55 D	Elimination of ATM Air Navigation Deficiencies	That, States concerned a) be urged to take urgent actions to correct the deficiencies in the ATM/AIS/SAR fields identified in Attachment A to the Report on Agenda Item 4 ; b) notify details of the problems/difficulties to the Regional Office; and c) designate a point of contact in each State to deal with deficiencies and provide details to the Regional Office by 22 October 2010.	ICAO APAC Office and States	Remedial action plan Challenges for the implementation of remedial action plan Point of contact	Noted and requested the Secretariat to accord highest priority in its work programme to the urgent elimination of the safety-related deficiencies. States reflected in the APANPIRG list of deficiencies are urged to establish action plans with fixed target dates. Also, commitment to the elimination of deficiencies should be pursued through all available mechanisms, including the annual Conference of DGCA's.	Ongoing Ongoing Completed
C 21/56 D	Cost Recovery Guidance Material Update	That, ICAO be invited to consider updating the cost recovery guidance material that would take into account States whose air traffic volume is not sufficient in obtaining the cost recovery for the necessary MET services required in Annex 3 and consider shared services in airspace blocks that are based on the number flights needed in obtaining the necessary cost for the services required for that airspace block.	ICAO HQ/ ATB/EAP	Updated guidance material in the <i>Manual on Air Navigation Services Economics</i> (Doc 9161).	Noted and requested the Secretariat to coordinate with ANSEP and WMO and consider, if necessary, updating guidance material in the <i>Manual on Air Navigation Services Economics</i> (Doc 9161).	2012
C 21/58 A	Establishment of RASGs – Consequent revision to TOR of APANPIRG	That meeting adopt the revised terms of reference of APANPIRG as shown in the Appendix A to the Report on Agenda Item 6.	ICAO APAC Office	Revised TOR of APANPIRG	Noted and requests the ANC to consider how the reports and actions resulting from RASG meetings will be handled.	Completed

Concl/Dec No. --- Strategic Objective*	Title of Conclusion	Text of Conclusion	Responsibility	Deliverable	Action Agreed by ANC on 10 March 2011 (ANC 186-7)	Reporting/ Completion date
C 21/59 D	Development of new Regional ANP	That, ICAO be invited to review the regional air navigation plan structure, processes and contents to incorporate them in to e-ANP and expedite its provision for use.	ICAO HQ/ ANB/SAST	Revised ANP and development of eANP	Noted and requested the Secretariat to continue with the development of eANPs.	November 2012

* Note: ICAO had established the following Strategic Objectives for the period 2005-2010:

A: Safety - Enhance global civil aviation safety;

B: Security - Enhance global civil aviation security;

C: Environmental Protection - Minimize the adverse effect of global civil aviation on the environment;

D: Efficiency - Enhance the efficiency of aviation operations;

E: Continuity - Maintain the continuity of aviation operations; and

F: Rule of Law - Strengthen law governing international civil aviation.

— END —