



ICAO

*International Civil Aviation Organization***SEVENTH MEETING OF SPECTRUM REVIEW
WORKING GROUP (SRWG/7)***Bangkok, Thailand, 15 – 17 February 2023***Agenda Item 2:** Review outcomes of relevant meetings**REVIEW OF RELEVANT ICAO MEETINGS**

(Presented by the Secretariat)

SUMMARY

The paper presents the relevant outcomes of the meetings held in 2022 including the thirty third Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/33), the twenty sixth meeting of Communication, Navigation, and Surveillance (CNS SG/26), Twelfth Meeting of the Regional Aviation Safety Group – Asia and Pacific (RASG-APAC/12) and relevant discussions in other meetings.

1. INTRODUCTION

1.1 The Thirty-third Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/33) was hosted by Indonesia at the Trans Resort Bali in Bali, Indonesia *from 22 to 24 November 2022* as a hybrid event (in-person and virtual participation). The Meeting was attended by **326** participants from **30** Member States, **2** Special Administrative Regions of China, and **7** International Organizations (ACI, CANSO, IATA, ICAO, IFALPA, IFATSEA and PASO). The APANPIRG/33 meeting report, working papers, information papers, and other resources can be accessed by the following link:

<https://www.icao.int/APAC/Meetings/Pages/2022-APANPIRG33.aspx>

1.2 The Twenty Sixth Meeting of the Communications, Navigation and Surveillance Sub-group (CNS SG/26) of APANPIRG was held *from 5 to 9 September 2022* via Video Tele-Conference (VTC) using Microsoft Teams. The meeting was attended by **247** participants from **26** States/Administrations, and **4** International Organizations, including 21 participants from industry partners. The CNS SG/26 meeting report, working papers, information papers, and other resources can be accessed by the following link:

<https://www.icao.int/APAC/Meetings/Pages/2022-CNS-SG-26.aspx>

1.3 The Twelfth Meeting of the Regional Aviation Safety Group – Asia and Pacific (RASG-APAC/12) was held *from 17-18 November 2022* in ICAO Asia and Pacific Office, Bangkok, Thailand. The Meeting was attended by **162** participants from **18** States/Administrations, **9** International

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Organizations and Industries Partners. The RASG-APAC/12 meeting report, working papers, information papers, and other resources can be accessed by the following link:

<https://www.icao.int/APAC/Meetings/Pages/2022-RASG-APAC12.aspx>.

1.4 The APANPIRG/33 meeting reviewed the outcomes of the CNS SG/26 and noted with appreciation the work done and achievements by the CNS SG and the contributory bodies reporting to APANPIRG through the CNS SG. The meeting discussed CNS-related matters and took actions discussed in the next section on the report of CNS SG/26 meeting and other papers presented under Agenda Item 3.4.

1.5 This paper summarized relevant information and updates with the highlight of the reviewed outcomes of relevant discussions of other meetings of CNS SG/26 and APANPIRG/33.

2. DISCUSSION

The actions taken by APANPIRG/33 meeting on Aeronautical Spectrum and Frequencies related matters are highlighted in blue below:

2.1 The CNS SG/26 meeting adopted the following **5** Conclusions and **2** Decisions:

Reference	Subject
Conclusion CNS SG/26/03 (<i>ACSICG/09/04</i>)	- Revised AFTN/ATSMHS Routing Directory
Decision CNS SG/26/04 (<i>SWIM TF/06/01</i>)	- The Use of the Internet for MET Information Services in Regional SWIM architecture
Decision CNS SG/26/07 (<i>SWIM TF/06/06</i>)	- Revised SWIM TF Terms of Reference
Conclusion CNS/SG/26/09	- Update of Flight Inspection Guidance Material (FIGM)
Conclusion CNS SG/26/10 (<i>SURICG/7/1 (DAPs WG/5/1)</i>)	- Mode S DAPs IGD 4.0
Conclusion CNS SG/26/12 (<i>SURICG/7/4</i>)	- Revised ADS-B Implementation and Operations Guidance Document (AIGD)
Conclusion CNS SG/26/13 (<i>ATMAS TF/3/1</i>)	- ATMAS IGD Edition 1.0

2.2 The contents of the above Conclusions/Decisions adopted by the CNS SG/26 are provided in **Attachment A** to this paper.

2.3 Based on the outcome of discussions on various agenda items, the CNS SG/26 meeting developed **5** Draft Conclusions and **1** Draft Decision for consideration by APANPIRG/33 Meeting, which were further adopted by APANPIRG/33. The Conclusions/Decisions adopted by APANPIRG/33 are as follows:

Reference	Subject
Conclusion APANPIRG/33/6 (CNS SG/26/01 (ACSICG/09/01 (CRV OG/09/01)))	- Revised Amendment of the Management Service Agreement for CRV project (RAS14801)
Conclusion APANPIRG/33/7 (CNS SG/26/02 (ACSICG/09/02 (CRV OG/10/01)))	- Extension of CRV Contract for one year.
Decision APANPIRG/33/8 (CNS SG/26/05 (SWIM TF/06/03))	- Harmonization of Timelines for SWIM-related Initiatives
Conclusion APANPIRG/33/9 (CNS SG/26/06 (SWIM TF/06/02, SWIM TF/06/04))	- The Asia-Pacific SWIM Implementation Timeframe and inclusion of the Asia/Pacific SWIM Implementation in the Asia/Pacific Seamless ANS Plan
Conclusion APANPIRG/33/10 (CNS SG/26/08 (SRWG/6/2))	- Planning Principle for Aeronautical Frequency Bands of 108-117.975 MHz, 960-1215 MHz and 117.975-137 MHz
Conclusion APANPIRG/33/11 (CNS SG/26/11 (SURICG/7/3))	- Revised Surveillance Strategy for the APAC Region

2.4 All APANPIRG/33 Conclusions related to CNS are provided in **Attachment B** to this paper. The following captures the highlights of previous discussions relevant to this Meeting.

Frequency Simulations for APAC

2.5 The APANPIRG/33 and CNS SG/26 meetings reviewed the latest development from SRWG/6 in simulating the VHF COM requirements for APAC in 2030. Preliminary analysis on the States' submission revealed the challenge of uncertainty to determine the medium-term spectrum requirements for VHF communication services. Further analysis is being conducted with concerned States to determine whether these requirements can be assigned.

2.6 In addition, the frequency simulation for India was discussed in SRWG/6 and reported to CNS SG/26 and APANPIRG/33, which the simulation demonstrated that the frequency requirements requested by India for up to 2030 can be satisfied within the frequency band 117.975 - 137 MHz with conditions, including a re-organization for the pools to which frequencies are allotted. A similar analysis in 3 - 5 years from 2022 was recommended to assess the severity of the congestion in this frequency band. From the study result, in case 8.33kHz channel spacing was identified as necessary, strategic planning similar to that of Europe could be adopted.

2.7 States/Administrations were invited to review and provide up-to-date information for Frequency List 3 by using Frequency Finder as the simulation result would only be meaningful for sufficient frequency data. States/Administrations were invited to report issues to the Secretariat team during this interactive process.

Implementation of VHF Com 8.33 kHz Channel Spacing Requirements in APAC Region

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2.8 Indonesia presented its preparations for the implementation of VHF COM 8.33 kHz channel spacing. As the implementation would directly impact the ANSPs, airline operators, ground service, and heliport operators as main users of such frequencies, Indonesia will conduct a further survey to ensure all registered civil aircraft operating in Indonesia are capable of operating at 8.33 kHz. Issues for implementation were identified in the Meetings and States should take note and refer to them when implementing 8.33kHz channel spacing. The SRWG/6 meeting suggested considering formulating an implementation roadmap along with deliberation with individual States when the matter matures in future.

Aeronautical Frequency Spectrum Coordination and Planning Criteria in the APAC Region

2.9 The APANPIRG/33 and CNS SG/26 meetings reviewed the current practices and coordination procedures for aeronautical facilities and services operating in the aeronautical frequency bands and the evolution of planning criteria employed. States should coordinate in principle with the Regional Office for all frequency assignments that may affect the use of frequency assignments coordinated through the ICAO mechanism. Owing the frequency use, States are encouraged to coordinate with the ICAO office to avoid possible interference. Detailed coordination requirements were stated in the State Letter Ref.: T 8/8.4, T 8/8.5 & T 8/8.6 – AP131/22 (CNS) dated 29 September 2022 for promulgating the **Conclusion SRWG/6/1 - Frequency coordination for aeronautical frequency bands of 190-526.5 kHz, 108-117.975 MHz, 960- 1215 MHz and 117.975-137 MHz.**

2.10 The meeting discussed the frequency planning principles adopted by the ASIA/PAC/3 RAN Meeting in 1993 which covered NDB (List 1), VOR, DME and ILS (List 2), VHF COM (List 3). The latest revision of the Handbook on Radio Frequency Spectrum Requirement for Civil Aviation (Doc 9718) Volume II has been approved by the Secretary-General and published in early 2022. Subsequently, the revised planning criteria contained in the revision for compatibility assessment of frequency assignments to VHF COM systems and NAV systems (ILS, VOR, DME and GBAS/VDB) have been incorporated in the new release of the Frequency Finder tool. With Doc 9718 overrides the previous RAN meeting outcome, except for that of NDB, the **Conclusion APANPIRG/33/10 (CNS SG/26/08 (SRWG/6/2)) Planning Principle for Aeronautical Frequency Bands of 108-117.975 MHz, 960-1215 MHz and 117.975-137 MHz** was supported by CNS SG/26 and adopted by APANPIRG/33.

Introduction of 50 kHz Channel Spacing for ILS and VOR Facilities in APAC

2.11 An ad-hoc group was formed to discuss the possible shortfall of VOR frequency channels with the current 100 kHz channel in the frequency band 108.000-117.975 MHz. The Group reported the challenges identified in implementing 50 kHz channel spacing were deemed primarily with airspace users (airline operators) and not with ground segment. The need for active coordination between the stakeholders including ANSPs, Civil/Military and Airline Operators (IATA) was also highlighted. A questionnaire was thus drafted for the APAC States and Airline Operators including IATA through State Letter Ref.: T 8/8.5 – AP067/22(CNS). The survey results reflected certain States had already implemented or planned to implement the 50 kHz channel spacing for ILS/VOR facilities. While most of these States indicated no issues in implementation/planning, States should ensure the aircraft operating in their airspaces are able to support the use of such 50 kHz channel spacing. States should also confirm with other relevant bodies, e.g. Defence and Flying Service bodies, their ability to operate with such 50 kHz channel spacing in their States. The results are planned to be further reviewed and discussed in this Meeting.

Potential Impacts from 5G Implementation on Aircraft Radio Altimeters – Outcomes in Relevant Meetings and Regional Updates

2.12 To summarize the discussion on the topic of 5G implementation and potential impacts on aircraft radio altimeters, this paper presented the discussion in APAC after CNS SG/25, and relevant

regional updates, including APANPIRG/32, RASG-APAC/11, SRWG/6, FSMP WG/13, FSMP WG/14 and certain discussions in other bodies. CNS Section of the ICAO APAC Regional Office has received zero reports on such interference in radio altimeters from the Member States or IATA so far. Member States would keep an eye on monitoring the impact of 5G on radio altimeters in their States/Administration regarding the safety and frequency spectrum issues. Member States CAA and airworthiness office may collect all relevant information and past issues reported, if any, and inform RASG-APAC in case of any significant concern. The issues related to frequency spectrum may be brought to the attention of CNS section of the ICAO APAC Office for further coordination with RASG-APAC and ICAO Headquarters.

Outcomes of APT-ICAO Webinar on 5G Implementation and Radio Altimeter

2.13 The APT-ICAO Webinar on 5G Implementation and Radio Altimeters was held on 23 August 2022. The Webinar was intended to promote the common understanding among the spectrum regulators, the airlines and telecommunication industries on the operation of Radio Altimeters in the band 4.2 – 4.4 GHz and the implementation of 5G in the adjacent bands ensuring aviation safety in the Asia-Pacific region. The Webinar has registered with about **250** participants. There were four topics presented by spectrum regulators (APT), aircraft manufacturers (Airbus), aviation (ICAO) and telecommunication industries (GSMA), covering the each-different viewpoints and concerns from these entities, potential mitigation measures and future roadmap of complete resolution of the issue of co-existence of 5G implementation and radio altimeters. The webinar served as a platform to bring together the national spectrum regulators, telecommunications service providers, and the aviation community for direct engagement. Presentation slides were available on the ICAO Webinar website at <https://www.icao.int/APAC/Meetings/Pages/2022-Webinar-on-5G-Implementation-and-Radio-Altimeter.aspx>.

Amendment 91 to Annex 10, Volume III on Selective Calling Codes

2.14 State Letter Ref.: AN 7/64.2.2-20/127 was discussed, including the action required by the letter regarding the Adoption of Amendment 91 to Annex 10, Volume III issued on 9 December 2020, which concerns the expansion of the pool of selective calling (SELCAL) codes. The SELCAL amendment uses 16 new audio tones on the existing 16 audio tones for a total of 32 available audio frequencies (known as SELCAL32). ANSPs are requested to upgrade ground systems to support the global implementation of SELCAL32 by 3 November 2022 and should consider taking the necessary steps to be compliant with the Amendment. State Letter Ref.: T 8/4.3: AP107/22 (CNS) dated 10 August 2022 of Subject of *Selective Calling (SELCAL) Code Pool Expansion* was issued to remind States/Administrations to notify ICAO Headquarters on any differences and compliance regarding Amendment 91 to Annex 10, Volume III before 3 October 2022, copy to ICAO APAC Regional Office to share readiness status for the applicability of SELCAL32.

Outcome of RASG-APAC/12 relevant to Aeronautical Frequency and Spectrum

2.15 Two Working Papers were discussed on the outcomes of 5G Workshop organized with Boeing (WP/22 of RASG-APAC/12), and the summary from CNS SG/26 on 5G/Radio Altimeters issue and Frequency Interference (WP/23 of RASG-APAC/12). The papers could be accessed on their Meeting website at <https://www.icao.int/APAC/Meetings/Pages/2022-RASG-APAC12.aspx>.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the outcome of the APANPIRG/33, CNS SG/26, and relevant contributory bodies, and take any necessary follow-up actions; and
- b) discuss any relevant matters as appropriate.

List of Conclusions/Decisions adopted by CNS SG/26 on behalf of APANPIRG on Technical Matters

Conclusion CNS SG/26/03 (ACSICG/09/04) - Revised AFTN/ATSMHS Routing Directory	
What: That, the AFTN/ATSMHS Routing Directory for the APAC Region provided in Appendix B to the report be further updated and distributed to States/Administrations as 29 th Edition.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: A number of new ATSMHS connections have been established and became operational. Consequential amendments to the AFTN/ATSMHS Routing Directory are required.	Follow-up: <input type="checkbox"/> Required from States
When: 9-Sep-22	Status: Adopted by Subgroup
Who: <input checked="" type="checkbox"/> CNS SG <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

Decision CNS SG/26/04 (SWIM TF/06/01) - The Use of the Internet for MET Information Services in Regional SWIM architecture	
What: That, the use of Internet for meteorological information services will be considered in designing the regional SWIM architecture.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: To support cost-effective and efficient meteorological information services for exchange of less-sensitive meteorological information in SWIM.	Follow-up: <input type="checkbox"/> Required from States
When: 9-Sep-22	Status: Adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SWIM TF	

Decision CNS SG/26/07 (SWIM TF/06/05) – Revised SWIM TF Terms of Reference	
What: That, the revised SWIM TF Terms of Reference (ToR) as shown in Appendix E be adopted.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: To align with the progress made since the SWIM TF/5 and outcomes of Action item 25-1 from CNS SG/25.	Follow-up: <input type="checkbox"/> Required from States
When: 09 September 2022	Status: Adopted by Subgroup

List of Conclusions/Decisions adopted by CNS SG/26 on behalf of APANPIRG on Technical Matters

Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SWIM TF
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Conclusion CNS SG/26/09 - Update of Flight Inspection Guidance Material (FIGM)	
What: That, the Edition 3.0 of the Flight Inspection Guidance Material (FIGM) provided in Appendix F to the Report be adopted.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: The FIGM is subject to regular review and update, in the light of on-going development of flight inspection standards and recommended practices.	Follow-up: <input type="checkbox"/> Required from States
When: 9-Sep-22	Status: Adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: -	

Conclusion CNS SG/26/10 (SURICG/7/1 (DAPs WG/5/1)): Mode S DAPs IGD 4.0	
What: The Mode S DAPs Implementation and Operation Guidance Document Edition 4.0 provided in Appendix G to the Report be adopted	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: The revised draft includes ADS-B DAPs and adds guidance on the measurement of 1030/1090 MHz usage.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 9-Sep-22	Status: Adopted by Sub-group
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: -	

Conclusion CNS SG/26/12 (SURICG/7/4) - Revised ADS-B Implementation and Operations Guidance Document (AIGD)	
What: That, the revised ADS-B Implementation and Operations Guidance Document (AIGD) provided in Appendix I to the Report, which consolidated all change proposals during SURICG/7, be adopted as Version 15.0.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: Updates from SURICG/7	Follow-up: <input type="checkbox"/> Required from States
When: 9-Sep-22	Status: Adopted by Subgroup
Who: <input checked="" type="checkbox"/> Subgroup <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SURICG	

List of Conclusions/Decisions adopted by CNS SG/26 on behalf of APANPIRG on Technical Matters

Conclusion CNS SG/26/13 (ATMAS TF/3/1) - ATMAS IGD Edition 1.0	
What: The Air Traffic Management Automation System Implementation and Operations Guidance Document Edition 1.0 provided in Appendix J to this Report be adopted	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: The revised draft has been added the DMAN function and reviewed/updated with inputs from various States	Follow-up: <input type="checkbox"/> Required from States
When: 9-Sep-22	Status: Adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: ATMAS TF	

A List of Conclusions adopted by APANPIRG/33 Meeting related to CNS

<p>Conclusion APANPIRG/33/6 (CNS SG/26/01 (ACSICG/09/01 (CRV OG/09/01))): Revised Amendment of the Management Service Agreement for CRV project (RAS14801)</p>	
<p>What: Recognizing that ICAO Technical Cooperation Bureau satisfactorily completed all the defined work items in the initial Management Service Agreement (MSA) and Project Document of RAS14801, that the required payments were settled, and that in end 2016, all the requirements of both parties have been fully completed and closed on record, That,</p> <p>i) all Pioneer States are encouraged to counter-sign the Revised amended Pro Document provided in Appendix A to Agenda Item 3.4;</p> <p>ii) any Pioneer State not countersigning is entitled to get its share of the remaining fund balance back. and</p> <p>iii) a Pioneer State for which a direct CRV connection is not considered feasible in 2017 by the selected vendor is entitled to get its initial contribution in full</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why: The initial scope of MSA was completed by ICAO TCB which allowed for a successful evaluation process and selection of a best and final offer; a majority of Pioneer States is willing to use the rest of their initial contribution to continue to support CRV implementation.</p>	<p>Follow-up: <input checked="" type="checkbox"/> Required from States</p>
<p>When: 24-Nov-22</p>	<p>Status: Adopted by PIRG</p>
<p>Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:</p>	

<p>Conclusion APANPIRG/33/7 (CNS SG/26/02 (ACSICG/09/02 (CRV OG/10/01))): Extension of CRV Contract for one year</p>	
<p>What:</p> <p>a) Recognizing that as per current contract, all authorities shall join the CRV project and sign the relevant Service Contract(s) with PCCWG with the billing start date on or before 31 December 2022 to not impose additional charges by the service provider and based on the survey responses of 2022, many Member States are in process to join CRV which may not be completed by December 2022, it is recommended to extend current CRV contract for one year.</p> <p>b) If agreed to extend, as per amended CRV contract, all authorities shall join the CRV program and sign the relevant Service Contract(s) with PCCWG with the billing start date on or before 31 December 2023 to not impose additional charges by the service provider.</p> <p>c) After the extension, the CRV contract expiry date will be 31 December 2028.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>

A List of Conclusions adopted by APANPIRG/33 Meeting related to CNS

Why: Several ICAO Member States have requested to extend CRV contract due to COVID-19 pandemic in CRV Implementation webinar held in 2021 and based on the response of the survey done in 2022, many Member States are in process to join CRV which may not be completed by December 2022.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 24-Nov-22	Status: Adopted by PIRG
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

Decision APANPIRG/33/8 (CNS SG/26/05 (SWIM TF/06/03)): Harmonization of Timelines for SWIM-related Initiatives	
What: To feedback to the ICAO Air Navigation Commission Technical Panels for a need to harmonize the implementation timelines of SWIM-related initiatives.	Expected impact: <input checked="" type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: There exists different timelines for the implementation of SWIM-related initiatives identified by various ICAO ANC Technical Panels. This creates confusion within States on their corresponding implementation sequences and as to how these different timelines are to be met.	Follow-up: <input type="checkbox"/> Required from States
When: 24-Nov-22	Status: Adopted by PIRG
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input checked="" type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SWIM TF	

Conclusion APANPIRG/33/9 (CNS SG/26/06 (SWIM TF/06/02, SWIM TF/06/04)): The Asia-Pacific SWIM Implementation Timeframe and inclusion of the Asia/Pacific SWIM Implementation in the Asia/Pacific Seamless ANS Plan	
What: 1. To set the timeframe for the implementation of SWIM in the Asia-Pacific region to be between 2024 and 2030, with 2030 being the target timeline for implementation completion. 2. To include SWIM implementation in the next edition of the Asia/Pacific Seamless ANS Plan.	Expected impact: <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: This is to set the concrete target implementation of the Asia-Pacific regional SWIM to assist States in harmonizing their implementation plans in order to achieve the seamless information exchange across the region in time for future operations, e.g. FF-ICE. Additionally, to ensure that SWIM, a key building block to achieve the vision outlined in ICAO Doc 9854 Global ATM Operational Concept	Follow-up: <input checked="" type="checkbox"/> Required from States

A List of Conclusions adopted by APANPIRG/33 Meeting related to CNS

(GATMOC), is captured in the Asia/Pacific Seamless ANS Plan, providing an overall framework for Asia/Pacific States to plan their implementations to meet the future performance requirements.	
When: 24-Nov-22	Status: Adopted by PIRG
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SWIM TF	

Conclusion APANPIRG/33/10 (CNS SG/26/08 (SRWG/6/2)): Planning Principle for Aeronautical Frequency Bands of 108-117.975 MHz, 960-1215 MHz and 117.975-137 MHz	
What: That, Doc 9718, Handbook on Radio Frequency Spectrum Requirements for Civil Aviation, Volume II, Second Edition – 2022, is adopted as the planning principle for aeronautical facilities and services operating in the aeronautical frequency bands of 108-117.975 MHz, 960- 1215 MHz and 117.975- 137 MHz in APAC.	Expected impact: <input type="checkbox"/> Political / Global <input checked="" type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: To implement the updated ICAO provisions	Follow-up: <input type="checkbox"/> Required from States
When: 24-Nov-22	Status: Adopted by PIRG
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: -	

Conclusion APANPIRG/33/11 (CNS SG/26/11 (SURICG/7/3)): Revised Surveillance Strategy for the APAC Region	
What: That, the Revised Surveillance Strategy for the APAC Region provided in Appendix D to Agenda Item 3.4 be adopted.	Expected impact: <input type="checkbox"/> Political / Global <input checked="" type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: To reflect the outcome of the latest development in surveillance technology.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 24-Nov-22	Status: Adopted by PIRG
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SURICG	