



ICAO

*International Civil Aviation Organization*

**SIXTH MEETING OF SPECTRUM REVIEW WORKING GROUP (SRWG/6)**

Video Teleconference, 1 – 3 March 2022

**Agenda Item 2:** Review outcomes of relevant meetings

**REVIEW OF RELEVANT MEETINGS**

(Presented by the Secretariat)

**SUMMARY**

This paper presents the relevant outcomes of the Twenty Fifth Meeting of the Communications, Navigation and Surveillance Sub-group (CNS SG/25), the Thirty Second Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/32) and relevant discussions in other meetings.

**1. INTRODUCTION**

1.1 The Thirty-second Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/32) was held from *1 to 3 December 2021* via video teleconference. The Meeting was attended by 278 participants from 28 Member States, 2 Special Administrative Regions of China, and 8 International Organizations (AAPA, ACI, CANSO, IATA, ICAO, IFALPA, IFATCA and PASO). APANPIRG/32 meeting report, working papers, information papers, and other resources can be accessed by following link:

<https://www.icao.int/APAC/Meetings/Pages/2021-APANPIRG32.aspx>.

1.2 The Twenty Fifth Meeting of the Communications, Navigation and Surveillance Sub-group (CNS SG/25) of APANPIRG was held from *18 to 22 October 2021* via video teleconference. The meeting was attended by 215 participants from 23 States/Administrations, and 4 International Organizations namely CANSO, IATA, IFALPA and IFATSEA, plus 28 participants from industry partners. CNS SG/25 meeting report, working papers, information papers, and other resources can be accessed by following link:

<https://www.icao.int/APAC/Meetings/Pages/2021-CNS-SG-25.aspx>.

1.3 The Fifth Meeting of the Spectrum Review Working Group (SRWG/5) of CNS SG was held from *15 to 17 March 2021* via video teleconference. The meeting was attended by 109 participants from Eighteen (18) States/Administrations and Three (3) International Organizations. SRWG/5 meeting report, working papers, information papers, and other resources can be accessed by following link:

<https://www.icao.int/APAC/Meetings/Pages/2020-SRWG5.aspx>.

**Agenda Item 2**

1-3/03/22

1.4 The APANPIRG/32 meeting reviewed the outcomes of the CNS SG/25, noted with appreciation the work done and achievements by the SG and the contributory bodies reporting to APANPIRG through the SG, the meeting discussed CNS related matters and took following actions on the report of CNS SG/25 meeting and other papers presented under Agenda Item 3.4.

1.5 This paper summarized relevant information and updates with the highlight on the reviewed outcomes of meetings of SRWG/5, CNS SG/25 and APANPIRG/32.

**2. DISCUSSION**

2.1 The CNS SG/25 meeting adopted following **8** Conclusions and **5** Decisions:

<b>Reference</b>	<b>Subject</b>
<b>Conclusion CNS SG/25/01</b> (ACSICG/08/01(CRV/08/01))	- CRV Implementation Plan amendment ( <i>Version 2.1</i> )
<b>Conclusion CNS SG/25/03</b> (SWIM TF/05/01)	- Asia/Pacific SWIM Implementation Plan and Status Survey
<b>Decision CNS SG/25/04</b> (SWIM TF/05/02)	- Revised SWIM TF Terms of Reference
<b>Conclusion CNS SG/25/05</b>	- The Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers
<b>Conclusion CNS/SG/25/06</b>	- Update of Flight Inspection Guidance Material (FIGM) for APAC Region
<b>Conclusion CNS SG/25/10</b> (SURICG/6/4)	- Mode S DAPs IGD 3.0
<b>Conclusion CNS SG/25/11</b> (SURICG/6/5)	- Revision of the Regional Supplement to ASTERIX Interface Control Document (ICD)
<b>Decision CNS SG/25/12</b> (SURICG/6/6)	- Revised ToR of Surveillance Study Group (SURSG)
<b>Conclusion CNS SG/25/13</b> (SURICG/6/7)	- Integrity of ICAO Aircraft Address and Target Identification in ADS-B / MLAT / Mode S Data and Flight Plan
<b>Decision CNS SG/25/14</b> (SURICG/6/8)	- Revised ToR of Surveillance Implementation Coordination Group (SURICG)
<b>Conclusion CNS SG/25/15</b> (SURICG/6/9)	- Revised ADS-B Implementation and Operations Guidance Document (AIGD)
<b>Decision CNS SG/25/16</b> (ATMAS TF/2/1 (APA TF/7/1))	- Dissolution of APA TF
<b>Decision CNS SG/25/17</b> (ATMAS TF/2/2)	- Revised ATMAS TF Terms of Reference

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

2.3 Based on the outcome of discussions on various agenda items, the CNS SG/25 meeting developed 4 Draft Conclusions for consideration by APANPIRG/32 Meeting, which were further adopted by APANPIRG/32. The Conclusions adopted by APANPIRG/32 are as follows:

<b>Reference</b>	<b>Subject</b>
<b>APANPIRG C 32/7</b> ( <i>Draft Conclusion CNS SG/25/02(ACSICG/08/02 (CRV/08/02))</i> )	- Implementation of CRV for small Pacific Island and small ANSP in the region using CRV Solution, PCCWG SLA Package D
<b>APANPIRG C 32/8</b> ( <i>Draft Conclusion CNS SG/25/07 (SURICG/6/1)</i> )	- Interrogator Code (IC) Planning and Coordination
<b>APANPIRG C 32/9</b> ( <i>Draft Conclusion CNS SG/25/08(SURICG/6/2 )</i> )	- Transition from II code to II and SI mixed code
<b>APANPIRG C 32/10</b> ( <i>Draft Conclusion CNS SG/25/09(SURICG/6/3)</i> )	- The APAC Regional Roadmap for Mode S Implementation

2.4 All APANPIRG/32 Conclusions related to CNS are included in **Attachment B** to this paper.

*VHF Simulation*

2.5 The CNS SG/25 meeting noted that with reference to the State Letter **Ref:** T 8/8.6-AP058/21(CNS) dated 9 April 2021 subject: *Simulation of VHF COM Frequency requirements for next 10 years*, sent in response to the **Conclusion** CNS SG/24/7, only **seven** Member States/Administrations have responded. The CNS SG Chair shared the concern that low responses to the State Letter may create an obstacle for the meaningful simulation of VHF COM Frequency requirements for next 10 years for APAC region and there may be a delay in formulating regional requirements on this matter. The meeting urged delegates to take necessary action to respond to the State Letter as early as possible.

*Spectrum and Interference*

2.6 The CNS SG/25 noted that SRWG/5 developed an action item to take necessary follow up action at the regional level, to support CAAs working with State’s spectrum regulators to avoid the future safety issues on radio altimeter due to 5G implementation. Furthermore, ICAO issued a state letter on *Potential safety concerns regarding interference to radio altimeters* (Ref.: SP 74/1-21/22), the Member States and Administrations were encouraged to consider as a priority, public and aviation safety when deciding how to enable cellular broadband/5G services in radio frequency bands near the bands used by radio altimeters. Member States were invited to report to ICAO APAC Regional Office in a timely manner once the interference to radio altimeters by these broadband technologies happens. Outcomes from CNS SG/25 on this issue were also shared to RASG-APAC/11 to alert the potential impact on flight safety.

2.7 CNS SG/25 agreed that Member States would keep an eye on monitoring the impact of 5G on radio altimeters in their States/Administrations regarding the safety and frequency spectrum issues. In parallel, it was advised that 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 the CNS section of the ICAO APAC Regional Office for the coordination with RASG-APAC and ICAO headquarter.

*ICAO Position for ITU WRC-23*

2.8 The ICAO State Letter E 3/5-21/37 *ICAO Position for the ITU WRC-23* was issued on 18 August 2021 informing Member States that the ICAO Council approved the ICAO Position for WRC-23 on issues of critical concern to aviation at its 223<sup>rd</sup> Session, which was held on 14 June 2021, and thus inviting Member States to consider the ICAO Position when developing the State's position for WRC-23 and to support the ICAO Position during WRC-23.

2.9 The ICAO Position is to be considered in conjunction with sections 7-II and 8 of the *Handbook on Radio Frequency Spectrum Requirements for Civil Aviation, Volume I— ICAO spectrum strategy, policy statements and related information* (Doc 9718, Second Edition, 2018). The Position should be seen as being the guiding document wherever conflicts between the Position and the Handbook are observed.

*Doc 9718, Volume I and II*

2.10 The latest revision of the Handbook on Radio Frequency Spectrum Requirement for Civil Aviation (DOC 9718), Volume I and Volume II, will be published in early 2022. The ICAO Secretariat initiated the revisions to the Handbook Volume II in 2018. The overall revisions were presented to APAC CNS SG/23 through IP/10 in 2019 and to APAC SRWG/4 through IP/02 in 2020, including a review to Chapter 1, new Chapters 3 - ILS, Chapter 4 - VOR, Chapter 5 – DME, Chapter 6 - GBAS/VDB and Appendix A with conversions and formulas relevant to frequency assignment planning. The “UNEDITED ADVANCE REVISION” of Doc 9718, Volume I and Volume II is uploaded at the Frequency Spectrum Management Panel (FSMP) website at <https://www.icao.int/safety/fsmp> on 30 July 2021. The Revision included all amendments resulting from FSMP WG/11 (1-12 March 2021, VTC). Doc 9718 Vol I included updates to Chapters 7 and 8 as well as Appendix F (ICAO Position). Doc 9718 Vol II included the new material as received from NSP/6 (2 - 13 November 2020, VTC). The planning requirements contained in the revision for compatibility assessment of frequency assignments to NAV systems (ILS, VOR, DME and GBAS/VDB) have been incorporated in the new release of Frequency Finder tool.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the outcome of relevant meetings and take any necessary follow-up actions; and
- b) discuss any relevant matters as appropriate.

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List of Conclusion/Decisions adopted by CNS SG/25 on behalf of APANPIRG on Technical Matters

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<b>Conclusion CNS SG/25/01 (ACSICG/08/01(CRV/08/01)) – CRV Implementation Plan amendment (Version 2.1)</b>	
<p>What: That, the CRV Implementation Plan be amended to include the following new text in paragraph 2.4.2 – IP Addressing</p> <p>iii. In the development of the IPv4 plan, a flexible margin has been designated to allow future growth or change. Through draft Conclusion CRV OG/8/01, using 10.46.0.1 to 10.46.255.254, each third party Service Provider (e.g. AIREON LLC providing Automatic Dependent Surveillance - Broadcast data over CRV) is assigned 254, 510, 764 or 1022 usable Network addresses (depending on Service Providers’ technical requirements); and</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why: To allocate IP addresses to third party service providers for the delivery of services over CRV</p>	<p>Follow-up: <input type="checkbox"/> Required from States</p>
<p>When: 22-Oct-21</p>	<p>Status: Adopted by Subgroup</p>
<p>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: ACSICG</p>	

<b>Conclusion CNS SG/25/03 (SWIM TF/5/01) – Asia/Pacific SWIM Implementation Plan and Status Survey</b>	
<p>What: To conduct a survey on SWIM implementation plan and status of Asia/Pacific Member States.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why: To establish a baseline understanding of SWIM implementation plan and status within the Asia/Pacific region so as to aid the development of the regional SWIM implementation roadmap.</p>	<p>Follow-up: <input checked="" type="checkbox"/> Required from States</p>
<p>When: 22-Oct-21</p>	<p>Status: Adopted by Subgroup</p>
<p>Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SWIM TF</p>	

List of Conclusions/Decisions adopted by CNS SG/25 on behalf of APANPIRG on Technical Matters

<b>Decision CNS SG/25/04 (SWIMTF/05/02) – Revised SWIM TF Terms of Reference</b>	
What: That, the revised SWIM TF Terms of Reference (ToR) as shown in <b>Appendix F</b> 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: To align with the progress made since the establishment of SWIM TF, the update of ICAO global and regional air navigation plans, and the revised task groups under SWIM TF adopted at SWIM TF/4.	Follow-up: <input type="checkbox"/> Required from States
When: 22-Oct-21	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	

<b>Conclusion CNS SG/25/05 – The Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers</b>	
What: That, <i>The Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers</i> (Eleventh Edition) in the <b>Appendix G</b> to the report is adopted and be published on the ICAO Regional Office website.	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 information in <i>The Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers Tenth Edition, April 2018</i> ) need to be updated as per the recommendation of CNS SG/24	Follow-up: <input type="checkbox"/> Required from States
When: 22-Oct-21	Status: Adopted by Sub-group
Who: <input checked="" type="checkbox"/> CNS Sub-group <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

List of Conclusions/Decisions adopted by CNS SG/25 on behalf of APANPIRG on Technical Matters

<b>Conclusion CNS/SG/25/06 - Update of Flight Inspection Guidance Material (FIGM) for APAC Region</b>	
What: That, the Edition 2.0 of the Flight Inspection Guidance Material (FIGM) provided in <b>Appendix H</b> 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: 22-Oct-21	Status: Adopted by Subgroup
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other:	

<b>Conclusion CNS SG/25/10 (SURICG/6/4) (DAPs WG/4/6) - Mode S DAPs IGD 3.0</b>	
What: That, the <i>Mode S DAPs Implementation and Operation Guidance Document</i> Edition 3.0 provided in <b>Appendix J</b> 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: Editorial correction and revision to reflect regional updates in implementation.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 22-Oct-2021	Status: Adopted by Sub-Group
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SURICG	

List of Conclusions/Decisions adopted by CNS SG/25 on behalf of APANPIRG on Technical Matters

<b>Conclusion CNS SG/25/11 (SURICG/6/5) (Draft Conclusion DAPs WG/4/7 and Draft Decision DAPs WG/4/8) - Revision of the Regional Supplement to ASTERIX Interface Control Document (ICD)</b>	
<p>What: ICAO APAC Regional Office to:</p> <p>a) update EUROCONTROL with the latest SAC allocation within Asia Pacific; and</p> <p>b) coordinate the allocation of SAC within Asia Pacific and not the SIC.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why:</p> <p>a) EUROCONTROL published the SAC for all the regions except Asia Pacific. It is believed that the publication will be beneficial to the developers of future message protocol and surveillance related applications.</p> <p>b) SIC is managed by State and there is little value for ICAO APAC to manage the SIC. Considering the workload to manage the SIC and the negligible benefits, it is proposed that ICAO APAC not to manage SIC.</p>	<p>Follow-up:</p> <p><input type="checkbox"/> Required from States</p>
When: 22-Oct-2021	Status: Adopted by Sub-Group
Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SURICG	

<b>Decision CNS SG/25/12 (SURICG/6/6): Revised ToR of Surveillance Study Group (SURSG)</b>	
<p>That, the Revised Terms of Reference of the Surveillance Study Group (SURSG) provided in <b>Appendix L</b> to the report be adopted.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political /Global</p> <p><input type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>
<p>Why: The SURSG/1 meeting reviewed the ToR and made amendments on adding chair role and function, frequency of the meeting of SURSG and the mode of the various task lead meetings for effective progress update, decision making, work assignments as they arise and the need to update the list of contributing States as necessary.</p>	<p>Follow-up: <input type="checkbox"/> Required from States</p>
When: 22-Oct-2021	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"/> APANPIRG <input checked="" type="checkbox"/> Other: SURICG	

List of Conclusions/Decisions adopted by CNS SG/25 on behalf of APANPIRG on Technical Matters

<b>Conclusion CNS SG/25/13 (SURICG/6/7) - Integrity of ICAO Aircraft Address and Target Identification in ADS-B / MLAT / Mode S Data and Flight Plan</b>		
What: To urge States/Administrations to proactively follow up with air operators to address discrepancies of ICAO Aircraft Address and Target Identification between ADS-B / MLAT / Mode S data and flight plan.	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: Such discrepancies will cause safety implications in ATC operation and induce additional workload to controllers and supporting staff in handling the cases.	Follow-up: <input checked="" type="checkbox"/> Required from States	
When: 22-Oct-2021	Status: Adopted by Sub-group	
Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: SURICG		

<b>Decision CNS SG/25/14 (SURICG/6/8): Revised ToR of Surveillance Implementation Coordination Group (SURICG)</b>		
That, the Revised Terms of Reference of the Surveillance Implementation Coordination Group (SURICG) provided in <b>Appendix N</b> 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 ToR from dissolved SEA/BOB ADS-B WG was reviewed and necessary updates were identified.	Follow-up: <input type="checkbox"/> Required from States	
When: 22-Oct-2021	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"/> APANPIRG <input checked="" type="checkbox"/> Other: SURICG		

<b>Conclusion CNS SG/25/15 (SURICG/6/9) - Revised ADS-B Implementation and Operations Guidance Document (AIGD)</b>		
What: That, the revised ADS-B Implementation and Operations Guidance Document (AIGD) provided in <b>Appendix O</b> to the report, which consolidated all change proposals during SURICG/6, is adopted as Version 14.	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/6	Follow-up: <input type="checkbox"/> Required from States	
When: 22-Oct-2021	Status: Adopted by Subgroup	
Who: <input checked="" type="checkbox"/> CNS Sub group <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/25 on behalf of APANPIRG on Technical Matters

<b>Decision CNS SG/25/16 (ATMAS TF/2/1 (APA TF/7/1)) - Dissolution of APA TF</b>	
<p>What: Noting that most of the tasks outlined in the ToR have been achieved and the completion of residual part of action items will be undertaken by ATMAS TF.</p> <p>That, the APA TF be dissolved.</p>	<p>Expected impact:</p> <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
<p>Why: The APA TF Terms of Reference have been completed and pending action items will be undertaken by ATMAS TF.</p>	<p>Follow-up: <input type="checkbox"/> Required from States</p>
<p>When: 22-Oct-2021</p>	<p>Status: Adopted by Sub-Group</p>
<p>Who: <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: ATMAS TF</p>	

<b>Decision CNS SG/25/17 (ATMAS TF/2/2) – Revised ATMAS TF Terms of Reference</b>	
<p>What: That, the revised ATMAS TF Terms of Reference (ToR) as shown in <b>Appendix P</b> of the Report be adopted.</p>	<p>Expected impact:</p> <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
<p>Why: After dissolution of the APA TF, the ongoing APAC regional AIDC work will be conducted by ATMAS TF.</p>	<p>Follow-up: <input type="checkbox"/> Required from States</p>
<p>When: 22-Oct-21</p>	<p>Status: Adopted by Sub-Group</p>
<p>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</p>	

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A List of Conclusions adopted by APANPIRG/32 Meeting related to CNS

<b>Conclusion APANPIRG/32/7 (CNS SG/25/02) - Implementation of CRV for small Pacific Island and small ANSP in the region using CRV Solution, PCCWG SLA Package D.</b>	
<p>What: That, the CRV OG should consider the following to assist small Pacific Islands &amp; small ANSP in APAC in the implementation of CRV:</p> <p>a) Small Pacific Island and small ANSP in the region to consider using CRV SLA package D as the CRV solutions to implement CRV for the exchange of voice &amp; AMHS services</p> <p>b) With target date to implement CRV by the end of 2021 by APANPIRG Conclusion C 31/12, it is recommended that the CRV OG to work closely with the small Pacific Islands, small ANSP in the region and PCCWG on a cost effective CRV solution to implement CRV.</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: To facilitate the implementation of CRV for the small Pacific Island &amp; small ANSP in the region</p>	<p>Follow-up: <input checked="" type="checkbox"/> Required from States</p>
<p>When: 03-Dec-2021</p>	<p>Status: Adopted by PIRG</p>
<p>Who: <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: ACSICG</p>	

<b>Conclusion APANPIRG/32/8 (CNS SG/25/07) - Interrogator Code (IC) Planning and Coordination</b>	
<p>What: That,</p> <p>With the need to extend the Use of Surveillance Identifier (SI) in Interrogator Code (IC) on top of Interrogator Identifier (II), the relevant APANPIRG Conclusions were updated as follows:</p> <p><i>Coordination Process for SSR Mode S Interrogator Code (IC) (formerly Conclusion 19/40)</i></p> <p>a) in view of the increasing density of SSR interrogator installations in the region, and that States have varying readiness to extend from Interrogator Identifier (II) to both Interrogator Identifier and Surveillance Identifiers (SI) codes, there will be a period whereby both II and SI will be used.</p> <p>b) while implementing SSR Mode S, States should take into account following issues while assigning IC for these installations:</p> <ul style="list-style-type: none"> <li>• for planning the implementation of SSR Mode S interrogators, administrations should ensure that the interrogators with overlapping coverage are not operating with the same IC.</li> <li>• where, the coverage of the interrogator extends beyond the boundaries of the State, The IC should be worked out in</li> </ul>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input type="checkbox"/> Economic</p> <p><input type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Ops/Technical</p>

<p>coordination with the ICAO Asia and Pacific Office and the neighbouring States concerned, and</p> <ul style="list-style-type: none"> <li>• administrations should inform the ICAO Asia and Pacific Office about the assigned IC for these installations.</li> </ul> <p><i>Coordination Requirements for SSR Mode S Interrogator Codes (IC) (formerly <b>Conclusion 20/56</b>)</i></p> <p>States be advised to provide the following information on SSR Mode S Interrogator Code to the ICAO Asia/Pacific Office for coordination and registration.</p> <p>a) Name of country/territory and location of facility;  b) Antenna Coordinates (Latitude and Longitude);  c) Elevation of antenna above the Mean Sea Level (MSL) in meters;  d) Maximum Coverage of SSR Mode S Interrogator in nautical mile;  e) II Code (1 to 15) or SI Code (1 to 63); and  f) Remarks (special configuration such as radar clustering, lockout override, II/SI mode capability)</p> <p><i>Planning Criteria for SSR Mode S Interrogator Code (IC) Assignment (formerly <b>Conclusion 20/57</b>)</i></p> <p>The planning criteria for SSR Mode S IC coordination and assignment as provided in Appendix J of Doc 9924 (Third Edition, 2020) be adopted for use in the Asia/Pacific Region.</p>		
<p>Why: Due to higher density of radars, some States are facing a shortage of II codes. It has to be solved by transiting from II to SI code. It is noted that state may use a mixture of II and SI codes before complete migration to SI code.</p> <p>The assignment of interrogator codes (IC), where necessary in areas of overlapping coverage, across international boundaries of flight information regions, shall be the subject of regional air navigation agreements.</p> <p>States still have to coordinate with ICAO APAC Regional Office on the allocation of II codes and SI codes.</p>	<p>Follow-up:  <input checked="" type="checkbox"/> Required from States</p>	
When: 03-Dec-2021	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		

*Note: This draft conclusion will supersede **APANPIRG Conclusions 19/40, 20/56 and 20/57** once adopted.*

<b>Conclusion APANPIRG/32/9 (CNS SG/25/08) - Transition from II code to II and SI mixed code</b>	
<p>What: States with Mode S radar capable of performing II/SI mode operations are encouraged to transit from II code to II and SI mixed code, so as to ease the shortage of II codes. States planning to perform</p>	<p>Expected impact:  <input type="checkbox"/> Political / Global</p>

A List of Draft Conclusions from CNS SG/23 for Consideration by APANPIRG/30 Meeting

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the transition shall coordinate with ICAO APAC Regional Office to obtain the SI codes.	<input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
Why: Due to higher density of radars, some States are facing a shortage of IC codes, which has to be solved by transiting from II to II and SI mixed code. It is noted that radars using II and SI codes can co-exist, hence there is no need for a big bang approach. However, States still have to coordinate with ICAO APAC Regional Office on the allocation of SI codes.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 03-Dec-2021	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	

<b>Conclusion APANPIRG/32/10 (CNS SG/25/09) - The APAC Regional Roadmap for Mode S Implementation</b>	
What: That, the APAC Regional Roadmap for Mode S Implementation provided in <b>Appendix D</b> to the Report on Agenda Item 3.4 be adopted.	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: The revised Roadmap defined the scope and rational steps for the implementation of Mode S in APAC region.	Follow-up: <input checked="" type="checkbox"/> Required from States
When: 03-Dec-2021	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	

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