

International Civil Aviation Organization



ICAO

**Twenty Sixth Meeting of the Communications/
Navigation and Surveillance Sub-group (CNS SG/26) of
APANPIRG**

Video Tele-Conference, 5 – 9 September 2022

Agenda Item 2: Review outcomes of APANPIRG/RASG Chairpersons review, APANPIRG/32 meeting, DGCA/57 meeting, ATM Sub-group and other major meetings relevant to CNS Sub-group

**OUTCOMES OF APANPIRG/32, RASG-APAC/11, APANPIRG/32 MIDYEAR REVIEW AND
9TH PIRG-RASG REGIONAL COORDINATION MEETING ON CNS**

(Presented by the Secretariat)

SUMMARY

This paper presents the CNS-related outcomes of APANPIRG/32, APANPIRG/32 Midyear Review and 9th PIRG-RASG Coordination Meeting for review by the meeting.

1. INTRODUCTION

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

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

1.3 Subsequently, the APANPIRG/32 Midyear Review and 9th Planning and Implementation Regional Group-Regional Aviation Safety Group (PIRG-RASG) Regional Coordination Meeting were held on 2 August 2022 via hybrid mode of face-to-face meeting and video teleconference. The meetings were attended by Chairpersons of APANPIRG, RASG-APAC and their contributory bodies, as well as Regional Director, Deputy Regional Director and Regional Officers from ICAO APAC Regional Office.

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1.4 This paper summarized the CNS-related outcomes from these meetings.

2. DISCUSSION**Outcome of APANPIRG/32 Meeting**

2.1 APANPIRG/32 reviewed the outcomes of CNS SG/25 through WP/12. The meeting 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 AI 3.4.

2.2 The meeting noted that CNS SG/25 meeting reviewed the outcome of a number of meetings of APANPIRG contributory bodies, adopted following **8** Conclusions and **5** Decisions on technical and operational matters:

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

Decision CNS SG/25/16 - Dissolution of APA TF
(ATMAS TF/2/1 (APA TF/7/1))

Decision CNS SG/25/17 *(ATMAS TF/2/2)* - Revised ATMAS TF Terms of Reference

2.3 The contents of above Conclusions adopted by the CNS SG/25 are provided in the **Attachment A** to this paper for easy reference.

2.4 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:

Reference	Subject
APAPPIRG C 32/7 <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
APANPIRG C 32/8 <i>(Draft Conclusion CNS SG/25/07 (SURICG/6/1))</i>	- Interrogator Code (IC) Planning and Coordination
APANPIRG C 32/9 <i>(Draft Conclusion CNS SG/25/08(SURICG/6/2))</i>	- Transition from II code to II and SI mixed code
APANPIRG C 32/10 <i>(Draft Conclusion CNS SG/25/09(SURICG/6/3))</i>	- The APAC Regional Roadmap for Mode S Implementation

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

2.6 The next APANPIRG meeting (APANPIRG/33) is tentatively scheduled for 21-23 November 2022 via video teleconference.

Outcome of RASG-APAC/11 Meeting

2.7 The outcome regarding 5G implementation to Radio Altimeter was shared to RASG-APAC/11 through WP/17 and the meeting noted the content of the paper. Together with other Working Papers from Member States reporting their effort on the topic, the meeting has adopted the following Conclusion and Decision. Details are further discussed in CNS SG/26 WP/09.

RASG-APAC C 11/3 and RASG-APAC D 11/6 - Potential Interference to Aircraft Radio Altimeter by 5G Telecommunications System – WP/17, WP-18 & WP-19

Outcome of APANPIRG/32 Midyear Review and 9th PIRG-RASG Coordination Meeting

2.8 APANPIRG/32 Midyear Review discussed APAC key challenges in Air Navigation, key outcomes and achievements, updates on APANPIRG/32 Action Plan and outstanding APANPIRG Conclusions/Decisions Action Plan. The Outstanding Action Plan is provided in **Attachment C** to this paper.

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2.9 APAC key challenges in Air Navigation included the following areas:

- Recovery of ANSPs and aerodromes from the impact of COVID-19 pandemic
- Slow implementation progress by States to meet Beijing Declaration Commitments
- Insufficient resources to improve compliance with ICAO provisions
- Slow implementation progress of APAC Air Navigation Priority Elements of APAC Seamless ANS Plan
- Development of NANP compatible with RANP
- Effective Engagement of PSIDS in ICAO Meetings and important activities (Webinars, Workshops etc)
- Unavailability of ATS in Kabul FIR – ongoing since 16 August 2021
- Potential Interference from 5G Implementation to Radio Altimeters in APAC States

2.10 In addition, the key outcomes and achievements were identified as follows:

- Monitor and track implementation of Beijing Declaration;
- Generic Documents developed related to the Certification of Aerodromes
- Progress on improving ANS safety and capacity in AKARA-FUKUE Corridor
- Publish of APAC Regional Roadmap for Mode S Implementation
- Publication of eleventh edition of the Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers
- ICAO APAC Webinars:
 - ATM Safety Assessment in Change Management (2)
 - Fundamentals of Air Navigation Services (ANS) and Flight Safety (15)
 - Global Reporting Format and Wildlife Hazard Management (4)
- States' and APANPIRG' Actions Air Navigation Deficiencies resolved in 2021

2.11 The 9th PIRG-RASG Coordination Meeting discussed the progress updates on the outcomes of previous PIRG-RASG Coordination Meeting and review the Lead Regional Group on Responsibilities.

2.12 In addition, the APANPIRG/32 and RASG-APAC/11 Reports were presented to the ANC Working Group of the Whole for Strategic Review and Planning (WG/SRP) via **AN-WP/9570** and **AN-WP/9569** respectively. Consolidated Annual Report on APANPIRG/32 and RASG-APAC/11 submitted to ANB was presented to Council – **226th Session [C-WP/15370]**.

2.13 Taking the opportunity of the Midyear Review, outcomes from 57th DGCA Conference Action Items related to Aviation Safety and Air Navigation were discussed. Besides, the impact of COVID-19 to ICAO meetings for 2022 and ICAO APAC business continuity plan were reviewed.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) note and take action as appropriate for Conclusions adopted by the CNS SG/25 and APANPIRG/32 provided in the **Attachments A and B** to this paper; and

- c) discuss any relevant matters as appropriate.

CNS SG/26
Attachment A to WP/02

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

Conclusion CNS SG/25/01 (ACSICG/08/01(CRV/08/01)) – CRV Implementation Plan amendment (Version 2.1)	
<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> <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: 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>	

Conclusion CNS SG/25/03 (SWIM TF/5/01) – Asia/Pacific SWIM Implementation Plan and Status Survey	
<p>What: To conduct a survey on SWIM implementation plan and status of Asia/Pacific Member States.</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: 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>	

CNS SG/26
Attachment A to WP/02

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

Decision CNS SG/25/04 (SWIMTF/05/02) – Revised SWIM TF Terms of Reference	
What: That, the revised SWIM TF Terms of Reference (ToR) as shown 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: 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	

Conclusion CNS SG/25/05 – The Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers	
What: That, <i>The Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers</i> (Eleventh Edition) in the Appendix G 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:	

CNS SG/26
Attachment A to WP/02

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

Conclusion CNS/SG/25/06 - Update of Flight Inspection Guidance Material (FIGM) for APAC Region	
What: That, the Edition 2.0 of the Flight Inspection Guidance Material (FIGM) provided in Appendix H 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:	

Conclusion CNS SG/25/10 (SURICG/6/4) (DAPs WG/4/6) - Mode S DAPs IGD 3.0	
What: That, the <i>Mode S DAPs Implementation and Operation Guidance Document</i> Edition 3.0 provided in Appendix J 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	

CNS SG/26
Attachment A to WP/02

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

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)	
<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	

Decision CNS SG/25/12 (SURICG/6/6): Revised ToR of Surveillance Study Group (SURSG)	
<p>That, the Revised Terms of Reference of the Surveillance Study Group (SURSG) provided in Appendix L 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	

CNS SG/26
Attachment A to WP/02

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

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		
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		

Decision CNS SG/25/14 (SURICG/6/8): Revised ToR of Surveillance Implementation Coordination Group (SURICG)		
That, the Revised Terms of Reference of the Surveillance Implementation Coordination Group (SURICG) provided in Appendix N 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		

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

Conclusion CNS SG/25/15 (SURICG/6/9) - Revised ADS-B Implementation and Operations Guidance Document (AIGD)	
What: That, the revised ADS-B Implementation and Operations Guidance Document (AIGD) provided in Appendix O 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	

Decision CNS SG/25/16 (ATMAS TF/2/1 (APA TF/7/1)) - Dissolution of APA TF	
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. That, the APA TF be dissolved.	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 APA TF Terms of Reference have been completed and pending action items will be undertaken by ATMAS TF.	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 checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: ATMAS TF	

Decision CNS SG/25/17 (ATMAS TF/2/2) – Revised ATMAS TF Terms of Reference	
What: That, the revised ATMAS TF Terms of Reference (ToR) as shown in Appendix P of 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: After dissolution of the APA TF, the ongoing APAC regional AIDC work will be conducted by ATMAS TF.	Follow-up: <input type="checkbox"/> Required from States
When: 22-Oct-21	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 checked="" type="checkbox"/> Other: ATMAS TF	

CNS SG/26
Attachment B to WP/02

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

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.	
<p>What: That, the CRV OG should consider the following to assist small Pacific Islands & 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 & 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 & 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>	

Conclusion APANPIRG/32/8 (CNS SG/25/07) - Interrogator Code (IC) Planning and Coordination	
<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"> • 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. • where, the coverage of the interrogator extends beyond the boundaries of the State, The IC should be worked out in 	<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>

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

<p>coordination with the ICAO Asia and Pacific Office and the neighbouring States concerned, and</p> <ul style="list-style-type: none"> • administrations should inform the ICAO Asia and Pacific Office about the assigned IC for these installations. <p><i>Coordination Requirements for SSR Mode S Interrogator Codes (IC) (formerly Conclusion 20/56)</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> <ol style="list-style-type: none"> 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><i>Planning Criteria for SSR Mode S Interrogator Code (IC) Assignment (formerly Conclusion 20/57)</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>
<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 checked="" type="checkbox"/>ICAO APAC RO <input type="checkbox"/>ICAO HQ <input checked="" type="checkbox"/>Other: SURICG</p>	

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

CNS SG/26
Attachment B to WP/02

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

Conclusion APANPIRG/32/9 (CNS SG/25/08) - Transition from II code to II and SI mixed code	
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 the transition shall coordinate with ICAO APAC Regional Office to obtain the SI codes.	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: 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	

Conclusion APANPIRG/32/10 (CNS SG/25/09) - The APAC Regional Roadmap for Mode S Implementation	
What: That, the APAC Regional Roadmap for Mode S Implementation provided in Appendix D 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	

Attachment B

Status of Outstanding Conclusions/Decisions up to APANPIRG/31 – Action Plan

Conclusion / Decision No --- Strategic Objective*	Title of Conclusion/Decision	Text of Conclusion/Decision	Responsibility	Deliverable	Target date	Status	Action by ANC
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
						<ul style="list-style-type: none"> • With further comments by CRV OG Chairs, if any on technical content, the ICAO TCB will submit new version of amended Pro document by 20 December 2021, which would be discussed in CRV OG/9 to be held from 25-27 January 2022. The outcome will be submitted for consideration of CNS SG/26. • The revised amended Pro Document proposed to be counter-signed by pioneer member states would be presented to APANPIRG/33. <i>(end of 2022)</i> <p>ONGOING</p>	

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