









**The Twenty Fifth Meeting of the Communications/Navigation and Surveillance (CNS SG/25) of APANPIRG**

**Video Tele-Conference, 18 – 22 October 2021 (UTC+7)**

	09:00 -10:00	10:00-11:15		11:30 - 13:30
<p><b>Mon 18 Oct</b>  (Day-1)</p>	<p> <b><u>Delegate Bag</u></b></p> <p><b><u>Session 1 (Opening Session): 60 min</u></b></p> <ul style="list-style-type: none"> <li>➤ Opening Speech by Mr. Ma Tao, ICAO Regional Director</li> <li>➤ Opening Remarks by Mr. Richard Wu, Chairman of the CNS Sub-group</li> <li>➤ Introduction of participants</li> <li>➤ Virtual Group Photo</li> <li>➤ Administrative information</li> </ul> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1) Please use <a href="#">IP/01- VIDEO TELE-CONFERENCE BULLETIN</a> for guidance to join the meeting.</li> <li>2) Download meeting documents from <a href="#">here</a>.</li> </ol>	<p><b><u>Session 2: 75 min</u></b></p> <p><b>Agenda Item 1: Adoption of agenda and Election of chair of the Sub-group</b></p> <ul style="list-style-type: none"> <li>➤ WP/01 - Provisional Agenda – Sec</li> <li>➤ Election of chair</li> </ul> <p><b>Agenda Item 2: Review outcomes of APANPIRG/ RASG Chairpersons review, APANPIRG/31 meeting, ATM Sub-group and other major meetings relevant to CNS Sub-group</b></p> <ul style="list-style-type: none"> <li>➤ WP/02 - Outcomes of APANPIRG/31, APANPIRG/31 Midyear Review and 8th PIRG-RASG Regional Coordination Meeting on CNS – Sec</li> <li>➤ WP/22 - Updates on CNS SG/24 and APANPIRG/31 Conclusions/Decisions, and Action Items – Sec</li> <li>➤ WP/03 – Air Traffic Management And Airspace Safety Monitoring Outcomes</li> <li>➤ WP/30 - Member States Support for CNS SG – Sec</li> </ul>	<p> <b>Chinney</b></p>	<p><b><u>Session 3: 120 min</u></b></p> <p><b>Agenda Item 3: Aeronautical Fixed Service (AFS)</b></p> <p><b>3.1 ACSICG/8 including: CRV OG/8 and Webinar on CRV Implementation</b></p> <ul style="list-style-type: none"> <li>➤ WP/04 - Review the Report of ACSICG/8 – Sec</li> <li>➤ IP/03 - Outcomes of ICAO Asia Pacific Implementation of CRV Webinar – Sec</li> <li>➤ IP/10 - CRV Post Implementation Issues in Bhutan – Sec</li> </ul> <p><b>3.2 AMHS readiness for IWXXM</b></p> <ul style="list-style-type: none"> <li>➤ WP/05 - AMHS Readiness Status for Supporting IWXXM Traffic of the States/Administrations – Sec</li> <li>➤ IP/02 - AMHS Connections between APAC and EUR/NAT – Sec</li> </ul> <p><b>3.3 Review Report of APA TF/7</b></p> <ul style="list-style-type: none"> <li>➤ WP/06 - Review of Outcomes of APA TF/7 Meeting – Sec</li> </ul> <p><b>3.4 SWIM TF/5 including SWIM workshop</b></p> <ul style="list-style-type: none"> <li>➤ WP/07 - Review Report of SWIM TF/5 – Sec</li> </ul> <p><b>Agenda Item 12: Discuss and share experience and application of new technologies</b></p> <ul style="list-style-type: none"> <li>➤ Presentation/01 - Uniting the Things that Fly - How to Integrate ATM and UTM for a Safer APAC Sky - Frequentis</li> </ul>

**The Twenty Fifth Meeting of the Communications/Navigation and Surveillance (CNS SG/25) of APANPIRG**

**Video Tele-Conference, 18 – 22 October 2021 (UTC+7)**

	09:00 -10:00	10:00-11:00		11:15 - 12:30
<p>Tues 19 Oct  (Day-2)</p>	<p> <a href="#">Delegate Bag</a></p> <p><b><u>Session 4: 60 min</u></b></p> <p><b>3.4 SWIM TF/5 including SWIM workshop</b></p> <ul style="list-style-type: none"> <li>➤ WP/07 - Review Report of SWIM TF/5 – Sec (Con'd)</li> <li>➤ IP/04 - Outcomes of SWIM Workshop – Sec</li> <li>➤ WP/29 – Proof of Concept for Exchanging Aeronautical, Flight and Weather Data Through SWIM Platform – IND</li> <li>➤ IP/18 - SWIM Implementation in Japan – JPN</li> </ul> <p><b>3.5 Other AFS related issues</b></p> <ul style="list-style-type: none"> <li>➤ IP/23 – Future Plans for Implementation of New ICAO SARPS Compliant AMHS in India-IND</li> </ul>	<p><b><u>Session 5: 60 min</u></b></p> <p><b>Agenda Item 4: Aeronautical Mobile Communications Service and Aeronautical electromagnetic spectrum utilization</b></p> <p><b>4.1 Update on status of datalink applications and VHF capability sharing by States</b></p> <ul style="list-style-type: none"> <li>➤ IP/17 - Update of AeroMACS Application and Specification in China – CHN</li> </ul> <p><b>4.2 Review Report of SRWG/5</b></p> <ul style="list-style-type: none"> <li>➤ WP/08 - Review Report of SRWG/5 – Sec</li> </ul> <p><b>4.3 Other related issues</b></p> <ul style="list-style-type: none"> <li>➤ WP/09- ICAO Position for ITU WRC-23- Sec</li> <li>➤ IP/05- Handbook on Radio Frequency Spectrum Requirements for Civil Aviation (DOC 9718, Volume II) – Sec</li> <li>➤ IP/06 - 5G Implementation and Potential Impacts on Aircraft Radio Altimeters – Sec</li> <li>➤ IP/12 - Status of 5G Implementation in Australia – AUS</li> </ul>	<p> CASRI</p>	<p><b><u>Session 6: 75 min</u></b></p> <p><b>Agenda Item 6: Surveillance</b></p> <p><b>6.1 SURICG/6 including: SURSG/1, Mode S DAPs WG/4 and ADS-B Implementation Webinar</b></p> <ul style="list-style-type: none"> <li>➤ WP/13 - Review Report of SURICG/6 – Sec</li> <li>➤ IP/08 - Outcomes of ICAO APAC Implementation of ADS-B Webinar – Sec</li> </ul> <p><b>6.2 Other surveillance related issues</b></p> <ul style="list-style-type: none"> <li>➤ IP/09 - Resolution of Conflicting Text in Doc. 8071 Vol. III Regarding Flight Inspections – SGP &amp; Sec</li> <li>➤ IP/13 - Mode S Activities Update in China - CHN</li> <li>➤ IP/24 – Implementation of Space-based ADS-B Surveillance for the Oceanic Regions of Indian FIRs – IND</li> </ul> <p><b>Agenda Item 7: Automation</b></p> <p><b>7.2 Other automation related issues</b></p> <ul style="list-style-type: none"> <li>➤ Presentation/02 - Approach Spacing Tool – Concept and Feature Overview - Thales</li> </ul>

**The Twenty Fifth Meeting of the Communications/Navigation and Surveillance (CNS SG/25) of APANPIRG**





**Video Tele-Conference, 18 – 22 October 2021 (UTC+7)**

	<b>09:00 -10:00</b>	<b>10:00-11:00</b>	 <b>11:15 - 13:30</b>
<p>Wed 20 Oct (Day-3)</p>	<p> <b>Delegate Bag</b></p> <p><b><u>Session 7: 60 min</u></b></p> <p><b>Agenda Item 5: Navigation</b></p> <p><b>5.1 Review Report of PBNICG/8</b></p> <ul style="list-style-type: none"> <li>➤ WP/10 - Review Report of PBNICG/8 – Sec</li> </ul> <p><b>5.2 Review Report of GBAS/SBAS ITF/3</b></p> <ul style="list-style-type: none"> <li>➤ WP/11 - Review Report of GBAS/SBAS ITF/3- Sec</li> </ul> <p><b>5.3 Review of 11th edition of updated Catalogue of Asia And Pacific Flight Inspection and Flight Validation Service Providers</b></p> <ul style="list-style-type: none"> <li>➤ WP/12 - Update of Catalogue of Asia and Pacific Flight Inspection and Flight Validation Service Providers – Sec</li> </ul> <p><b>5.4 Other navigation related issues</b></p> <ul style="list-style-type: none"> <li>➤ WP/23 - The BDS Standardization and Application in Civil Aviation – CHN</li> </ul>	<p><b><u>Session 8: 60 min</u></b></p> <p><b>Agenda Item 5: Navigation</b></p> <p><b>5.4 Other navigation related issues</b></p> <ul style="list-style-type: none"> <li>➤ WP/26 - Update of Flight Inspection Guidance Materials (FIGM) for APAC Region – CHN &amp; HKG</li> <li>➤ IP/07 - Proposals for the Amendment of Annex 10, Volume I, on DFMC and GBAS – Sec</li> <li>➤ IP/11 - Compatibility of Other GNSS Positioning Services with Aviation Services – AUS</li> <li>➤ IP/14 - Research on Operational Quality Analysis of Instrument Landing System Based on Airborne DAR Data – CHN</li> <li>➤ IP/19 - Concept of Operations for GNSS Event Reporting – SGP</li> <li>➤ IP/20 - Status of GBAS Implementation in Japan- JPN</li> <li>➤ IP/21 - SBAS Status Update in Japan – JPN</li> </ul> <p><b>Agenda Item 7: Automation</b></p> <p><b>7.1 Review Report of the Second Meeting of ATM Automation Systems Task Force (ATMAS TF/2);</b></p> <ul style="list-style-type: none"> <li>➤ WP/14 - Review Report of ATMAS TF/2 – Sec</li> </ul>	<p><b><u>Session 9: 135 min</u></b></p> <p><b>Agenda Item 7: Automation</b></p> <p><b>7.2 Other automation related issues</b></p> <ul style="list-style-type: none"> <li>➤ IP/25 – Future Plan for ATC Automation System Implementation in India – IND</li> <li>➤ IP/26 – Implementation of the Weather Data Converter for a Legacy Automation System as an Interfacing to TDWR – ROK</li> </ul> <p><b>Agenda Item 8: Review and updates</b></p> <ul style="list-style-type: none"> <li>➤ WP/28 - Updates on ICAO Annex 10 VI RPAS C2 Link – Sec</li> </ul> <p><b>8.1 Seamless ANS Reporting Process including the ASBU regional performance dashboard /implementation plan</b></p> <p><b>8.2 National ANP and elements related to CNS</b></p> <ul style="list-style-type: none"> <li>➤ WP/31 - Seamless ANS Plan and Monitoring Update – Sec</li> <li>➤ WP/15 - Review of Regional CNS Requirements in ICAO APAC e-ANP, Seamless ANS Plan and Updates on National Air Navigation Plan (NANP)- Sec</li> <li>➤ IP/22 - The Long-Term Vision for The Future Air Traffic Systems of Japan (CARATS) – JPN</li> </ul> <p><b>8.3 Beijing Declaration implementation related to CNS</b></p> <ul style="list-style-type: none"> <li>➤ WP/16 - Updates on Beijing Declaration Implementation Related to CNS – Sec</li> </ul> <p><b>Agenda Item 11: Cybersecurity of CNS/ATM systems</b></p> <p><b>11.2 Other Cybersecurity related issues</b></p> <ul style="list-style-type: none"> <li>➤ Presentation/03 - Cybersecurity in ATM System of Systems Approach - Patch Management – Thales</li> <li>➤ Presentation/04 - Information Security Requirements for Exchange of Information over IP- Sec</li> </ul>



**The Twenty Fifth Meeting of the Communications/Navigation and Surveillance (CNS SG/25) of APANPIRG**

**Video Tele-Conference, 18 – 22 October 2021 (UTC+7)**

	09:00 -10:30	10:30-12:00	 12:15 - 13:30
<p>Thurs 21 Oct  (Day-4)</p>	<p> <a href="#">Delegate Bag</a></p> <p><b><u>Session 10: 90 min</u></b>  <b>Agenda Item 11: Cybersecurity of CNS/ATM systems</b></p> <p><b>11.1 Review outcomes of ICAO Cyber Security Webinar</b>  <b>11.2 Other Cybersecurity related issues</b></p> <ul style="list-style-type: none"> <li>➤ WP/32 - Implications of Cybersecurity and Associated Requirements for CRV Operations – USA</li> <li>➤ WP/33 - Cybersecurity in Air Navigation Activities - Sec</li> <li>➤ WP/19 - Outcomes of ICAO Asia Pacific Regional Cybersecurity Webinar – Sec</li> </ul> <p><b>Agenda Item 9: Review status of CNS deficiencies (APANPIRG Def. List)</b></p> <ul style="list-style-type: none"> <li>➤ WP/17 - Review Status of CNS Deficiencies – Sec</li> </ul> <p><b>Agenda Item 10: Human Factors and Air Traffic Safety Electronics Personnel (ATSEPs) related training</b></p> <p><b>10.1 Review outcomes of small working group study on human factor issues of ATSEP</b></p> <ul style="list-style-type: none"> <li>➤ WP/18 - Review Outcomes of Small Working Group Study on Human Factor Issues of ATSEP – IFATSEA &amp; Sec</li> </ul>	<p><b><u>Session 11: 90 min</u></b></p> <p><b>Agenda Item 12: Discuss and share experience and application of new technologies, including big data analysis, artificial intelligence, Digital Tower, counter UAS detection and identification system, UTM, etc.</b></p> <ul style="list-style-type: none"> <li>➤ WP/24 - UAS-Based PAPI Inspection Technology in China – CHN</li> <li>➤ WP/25 - Trial Inspection on CNS Outstations by Drone to Enhance Maintenance Work in Hong Kong, China – HKG</li> <li>➤ WP/27 - Development of an Integrated Safeguarding Surface to Uphold Flight Safety While Facilitating Infrastructure / Building Developments in Hong Kong, China – HKG</li> <li>➤ IP/15 - Standard Establishment of Data Link for UAS-Based Flight Inspection – CHN</li> <li>➤ IP/16 – The Implementation of A-SMGCS Level IV Operation in Beijing Daxing International Airport – CHN</li> <li>➤ Flimsy 03 – Standard Establishment of UAS-based Flight Inspection System in China – CHN</li> </ul>	<p><b><u>Session 12: 75 min</u></b></p> <p><b>Agenda Item 12: Discuss and share experience and application of new technologies, including big data analysis, artificial intelligence, Digital Tower, counter UAS detection and identification system, UTM, etc.</b></p> <ul style="list-style-type: none"> <li>➤ Presentation/05 - Application of Knowledge Graph in Air Traffic Management - China State Key Laboratory of ATM System and Technology</li> </ul> <p> <b>Agenda Item 13: CNS related work/projects impacted by COVID-19</b></p> <ul style="list-style-type: none"> <li>➤ WP/20- Impact of COVID-19 to CNS Works in 2021 – Sec</li> </ul> <p><b>Agenda Item 14: Dates of next meeting and any other business</b></p> <ul style="list-style-type: none"> <li>➤ WP/21 - CNS Points of Contact – Sec</li> <li>➤ Flimsy/01 -CNS meeting planning for 2022 - Sec</li> </ul>

***The Twenty Fifth Meeting of the Communications/Navigation and Surveillance (CNS SG/25) of APANPIRG***

***Video Tele-Conference, 18 – 22 October 2021 (UTC+7)***



**10:00-12:00**

**Fri  
22 Oct**



**Delegate Bag**

**(Day-5) Session 13: 120 min**

**Agenda Item 14: Dates of next meeting and any other business**

- *Review Draft report of the meeting*
- *Closing Remark*