



*International Civil Aviation Organization*  
 CAR/SAM Regional Planning and Implementation Group (GREPECAS)  
**Eighteenth Meeting of the CAR/SAM Regional Planning and Implementation Group**  
**(GREPECAS/18)**  
**Punta Cana, Dominican Republic, 9 to 14 April 2018**

**Agenda Item 3: Air navigation activities at global, inter-regional and intra-regional level**

**3.2 Follow-up on the implementation of global, inter-regional and intra-regional activities**

**Planning and Implementation Regional Group (PIRG) Activities in other Regions**

(Presented by the Secretariat)

**SUMMARY**

This paper provides an update on the activities of other Planning and implementation Regional Groups (PIRGs) that have been held since the Fourth Meeting of the Programmes and Projects Review Committee (PPRC/4).

**1. INTRODUCTION**

1.1 There have been seven Planning and Implementation Regional Group (PIRG) Meetings since the Fourth Meeting of the Programmes and Projects Review Committee (PPRC/4) that was held at the ICAO South American (SAM) Regional Office, in Lima, Peru, from 12 to 14 July 2016.

- a) the Fifty-Eighth Meeting of the European Air Navigation Planning Group (EANPG/58) from 28 November to 1st December 2016 and Fifty-Ninth Meeting of the European Air Navigation Planning Group (EANPG/59) combined with the Sixth Meeting of the Regional Aviation Safety Group (RASG-EUR/6) 30 October to 3rd November 2017;
- b) the Sixteenth Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/16) 13 to 16 February 2017;
- c) the Fifty-Third Meeting of the North Atlantic Systems Planning Group (NAT SPG/53 ) was held from 26 to 29 June 2017;
- d) the Twenty Seventh Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/27) was held from 5 to 8 September 2016 and APANPIRG/28 from 11 to 14 September 2017; and
- e) the Twenty First Meeting of the Africa-Indian Ocean Region (AFI) Planning and Implementation Regional Group (APIRG/21) was held back to back with the Fourth Regional Aviation Safety Group (RASG/AFI/4), from 9 to 11 October 2017.

**2. The Fifty-Eighth Meeting of the European Air Navigation Planning Group (EANPG/58) and EANPG/59 Combined with the Sixth Meeting of the Regional Aviation Safety Group (RASG-EUR/6)**

2.1 The EANPG/58 meeting was informed about recent significant international aviation developments and took note of the significant number of amendments to the ICAO Annexes and

Procedures for Air Navigation Services (PANS) including Annexes 1, 2, 3, 4, 6, 8, 9, 10, 11, 13, 14, 15, 19, and Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM, Doc 4444), Procedures for Air Navigation Services – Aerodromes (PANS-Aerodromes, Doc 9981) and the Procedures for Air Navigation Services - Aircraft Operations (PANS-OPS, Doc 8168) that had become applicable 10 November 2016. The EANPG was also informed about the new proposed amendments to ICAO Annexes and PANS documents (Annexes 1, 6, 8, 10, 16, 17 and 19 and Procedures for Air Navigation Services – Training (PANS-TRG, Doc 9868) and the Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS, Doc 8168)). A number of ICAO State letters and ICAO documents on a wide range of subjects had also been published since the last meeting.

2.2 The EANPG/58 meeting agreed, through Conclusion 58/02 (Outcome of the Black Sea Task Force), to invite ICAO to consider actions similar to those that enabled the normalization of flight operations in previous cases and specifically requested the Legal and External Relations Bureau of ICAO provide clarifications concerning the power of ICAO to temporarily suspend a specific portion of the Air Navigation Plan.

2.3 The EANPG/59 meeting was provided with high-level information on the transition plan from RNAV to RNP under development by ICAO for receiving feedback from the regions. The ICAO Regions would be requested to consider transition from RNAV to RNP in the regional plans and ensure that sufficient time would be allocated to this task to successfully implement the new charts.

2.4 The EANPG/59 meeting was presented with a high-level description of the ICAO implementation strategy to increase quality in aeronautical charting products and their compliance with ICAO standards. This strategy proposed a two-phases approach: PHASE 1 (“short-term” strategy) and PHASE 2 (“long-term” strategy).

2.5 EANPG/59 discussed the transition arrangements to be considered in order to deliver the revised working arrangements for the EUR Region, anticipated as a consequence of the recent DGCA Meeting (EURNAT-DGCA Conclusion 2017/6 - New EUR Working Structure). The meeting focused on the principles to be applied in drafting new Terms of Reference, the interim Chairmanship arrangements for the EANPG and the creation of a small Transition Project Team (TPT). The meeting agreed create a Project Team also agreed that Mr Phil Roberts would continue as the Chair pending the election of a new chair for European Region Aviation Systems Planning Group (EASPG) in 2018.

### 3. **Sixteenth meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG), (Kuwait, 13-16 February 2017)**

3.1 The third MIDANPIRG/RASG-MID Coordination Meeting (MRC/3) was held on 14 February 2017. The MIDANPIRG/16 meeting noted that the MRC/3 meeting reviewed and updated the table listing the subjects in which both MIDANPIRG and RASG-MID have interest with an assignment of the leading Group in Appendix 4.1A of the report.

3.2 A working paper presented by Qatar proposed to merge the activities of MIDANPIRG and RASG-MID. The meeting supported the establishment of an Action Group composed of Qatar (Rapporteur), Oman, UAE, IATA and ICAO to develop a comprehensive study to identify the weaknesses/lack of effectiveness and challenges of the current mechanisms and the areas of duplication, as well as the associated causes; then propose possible mitigation measures, including the option of merging the activities of MIDANPIRG and RASG-MID, with clear identification of the pros and cons of each option.

3.3 Call sign similarity and confusion was addressed in three WP’s presented by IATA, the Secretariat and UAE, respectively. The meeting was provided with a progress report on the

implementation of the MAEP Call Sign Confusion (CSC) Initiative. The meeting noted with appreciation the progress achieved, and that the MID Region experience has been considered by the adjacent ICAO Regions. The meeting commended the work and efforts of the CSC Initiative Team and the support provided by EUROCONTROL.

3.4 The meeting recalled that the High-Level Briefing to DGCAs and CEOs held in Doha, Qatar on 26 May 2016, was apprised of the ICAO NCLB Initiative and the means to achieve its objectives. The meeting was then presented with the first Draft of the MID Region NCLB Strategy prepared by the Secretariat as at Appendix 3O of the report. It was highlighted that the MID Region NCLB Strategy incorporates the previously agreed commitments of the Doha Declaration, and aims to foster the achievement of the regional targets.

3.5 The initial results of the MID RVSM Safety Monitoring Report (SMR) 2015 were presented to the ANSIG/2 meeting by the MIDRMA. The meeting reviewed the final version of the MID RVSM SMR 2015. The meeting noted that the results of the MID RVSM SMR 2015 were calculated for twelve (12) FIRs in the Middle East Region. Tripoli and Sanaa FIRs were excluded from the analysis due to the non-submission of the required traffic data. The MID RVSM SMR 2015 presents evidence that, according to the data and methods used, the key safety objectives as set out by MIDANPIRG, through Conclusion 12/16, continue to be met.

3.6 The meeting was apprised of the state of air transport in the MID Region. It was highlighted in particular that air carriers of the MID Region recorded the highest annual growth of 10.2 per cent in terms of Revenue Passenger-Kilometers (RPK) on total scheduled services in 2015, compared to 11.2 per cent growth in 2014. With its combined economic strength and airline network expansion, International traffic on scheduled services of air carriers in the MID Region, which represents 95.3 per cent of the Region's total RPK, recorded 10.7 per cent annual growth in 2015. The airlines of the MID Region showed a stable growth in 2015 and in 2014 in terms of aircraft departures. The total number of scheduled commercial departures in 2015 grew at a pace of 4.8 per cent to reach about 1.32 million departures, compared to a growth rate of 4.4 per cent recorded in 2014. Cargo traffic performed by MID carriers recorded the highest annual growth of 11.9 per cent in 2015 in terms of freight tonne-kilometers (FTK), compared to 11.2 per cent in 2014. Air freight markets performed by MID carriers are almost exclusively international and the United Arab Emirates and Qatar, both accounting for 87.5 per cent of the total freight traffic, recorded annual growths of 7.2 per cent and 26.2 per cent, respectively, on total scheduled services.

3.7 With respect to B0-APTA (ASBU Implementation) the meeting noted the challenges identified by the PBN SG/2 meeting (Sharm El Sheikh, Egypt, 22-25 February 2016). The meeting emphasized that the MID Region Flight Procedure Programme (MID FPP) is the optimal solution that would support States to overcome most of the identified challenges, and will foster the PBN implementation in the MID Region. The MID FPP will be hosted in Lebanon and is planned to start operations on 1 September 2017, pending the States' signature of the Project Document with ICAO and securing the expenses of the MID FPP Manager for the first year. Accordingly, the meeting encouraged States and stakeholders to support the establishment of the MID FPP.

3.8 In order to support AIM Planning and Implementation in the MID Region, the ICAO MID Office developed draft "Guidance for AIM Planning and implementation in the MID Region". The Document explains concept and operational elements of AIM; outlines the Regional and National AIM planning (Roadmaps); and provides guidance and tools for their implementation at the Regional and National levels.

3.9 The meeting recalled that the ANSIG/2 meeting (Cairo, Egypt, 6-8 December 2016) noted with concern that no input were received from States to the second MID Air Navigation Environmental Report. Therefore, the second MID Air Navigation Environmental Report could not be developed by the APM TF/2 and TF/3 meetings. Accordingly, the meeting agreed with the proposal

of the ANSIG/2 meeting to dissolve the APM TF. The environment-related tasks would be handled by ANSIG.

#### **4. Fifty Third Meeting of the North Atlantic Systems Planning Group (NAT SPG/53 ) (Paris, France 26-29 June 2017)**

4.1 The NAT SPG/53 meeting took note of the latest adopted amendments and proposals for amendment to a number of ICAO Annexes and Procedures for Air Navigation Services (PANS) , as well as ICAO State Letters and ICAO Documents on a wide range of subjects. Several ICAO global and NAT region-related meetings that would take place in the near future were also noted, including the 2nd Global Air Navigation Industry Symposium (GANIS) and the 1st Safety and Air Navigation Implementation Symposium (SANIS) on 11-15 December 2017, as well as the 13th Air Navigation Conference (AN-Conf/13) proposed to be held in October 2018 (ICAO State Letter 14/1-17/54 of 28 April 2017 refers). In this respect, the NAT SPG was informed that there would be a Global Planning and Implementation Regional Groups (PIRGs) /Regional Aviation Safety Groups (RASGs) Forum that would be held during the GANIS/SANIS meeting with the purpose to support the implementation of Global Air Navigation Plan (GANP, Doc 9750) /Global Aviation Safety Plan (GASP, Doc 10004) .

4.2 The NAT SPG was provided with a high-level briefing from the ICAO Programmes Coordination and Implementation (PCI) Section on the ICAO implementation strategy to ensure seamless harmonization and integration of the ICAO global and regional implementation programmes. It was noted that the PCI Section was responsible for supporting States in the selection, planning and implementation of the GANP/GASP elements. This included providing assistance and support in the resolution of air navigation deficiencies and working with the PIRGs, RASGs and the Regional Offices to help determine regional and sub-regional priorities and targets for GANP/GASP implementation.

4.3 The NAT SPG recalled that the 49th Meeting of the NAT Implementation Management Group (NAT IMG/49) and 15th Meeting of the NAT Safety Oversight Group (NAT SOG/15) had been presented with the outcomes of the NAT Southeast Corner Routes Project Team (SCRPT). The discussions on this topic resulted in NAT SPG Conclusion 53/1 (approved by correspondence by NAT SPG members, EUR/NAT letter 16-0610.TEC refers) concerning postponement of NAT Data Link Mandate (DLM) Phase 2B on Tango Routes.

4.4 The NAT SPG was provided with an update on the NAT progress concerning the Space-based Automatic Dependent Surveillance – Broadcast (SB ADS-B) implementation. It was noted that per NAT IMG Decision 49/7, the SB ADS-B project team (PT) handed over the updated provisional version of the NAT SB ADS-B Concept of Operations (CONOPS) to the NAT Procedures and Operations Group (NAT POG) that would be responsible for further maintenance. In this respect the NAT SPG noted that the outcome of the ICAO Separation and Airspace Safety Panel (SASP) work would need to be taken into account in the further updates to the NAT SB ADS-B CONOPS.

4.5 The NAT SPG was apprised of the discussions concerning the updated NAT PBCS implementation plan and the need for another NAT PBCS workshop in the 2nd half of 2017 to share experience on PBCS authorization procedures and processes. It was noted that the workshop could also be an opportunity to present the outcome of the NAT discussions on PBCS monitoring information sharing mechanisms and other NAT developments with regards to PBCS, e.g. Aeronautical Information Circulars (AIC), Advisory Circulars (AC), etc. It was emphasised that the main target audience for this workshop should be State authorities and airspace users, specifically those that are not represented in the NAT SPG working structure.

4.6 The NAT SPG agreed that the near-term proposed solution, until other centralized solutions were agreed and implemented, would be that the NAT ANSPs provide PBCS monitoring results of underperforming aircraft directly to the NAT airspace users and State authorities concerned.

The routine monitoring information would also be made available directly by the ANSPs, either through sharing or by making it available on request. It was noted that this option would not require any regional or global coordination process to changes the ToRs of various organizations and/or requesting additional resources. However, the difficulty would be for the ANSPs to obtain and maintain all contact data for the recipients of information. In this respect, it was noted that this option could be implemented in two-steps; the first step being through coordination between ANSPs and airspace users, escalated to the second step, if required, at the level of airspace users' State authorities.

4.7 Concerning the future centralized solution for communicating information on underperforming aircraft, the NAT SPG was informed about the discussions during the 12th meeting of the Regional Monitoring Agencies Coordination Group (RMACG) held from 22 to 26 May 2017. It was noted that RMACG/12 discussed potential processes for reporting PBCS non-performance and for collecting and verifying PBCS approval status. In view of the above, the NAT SPG agreed that changes to the North Atlantic Central Monitoring Agency (NAT CMA) ToRs, as well as all other RMAs would need to be prepared and submitted to the appropriate PIRGs for review and approval. The United Kingdom pointed out that they would assess the impact of the proposed changes on the NAT CMA funding and coordinate, as appropriate.

4.8 The NAT SPG was provided with information on a recently conducted volcanic ash exercise (VOLKAM17) and volcanic ash exercise (VOLCEX17) managed by the Volcanic Ash Exercises Steering Group for the (far) Eastern part of the EUR Region (EUR (EAST) VOLCEX/SG and the Volcanic Ash Exercises Steering Group for the EUR and NAT Regions (VOLCEX/SG)), respectively. The NAT SPG recalled that one of the main goals of these exercises was to test the volcanic ash contingency plan for the EUR and NAT Regions (EUR Doc 019, NAT Doc 006, Part II) with the objective to improve the response to volcanic eruptions and volcanic ash contamination by the relevant national supervisory authorities, service providers (ATS, aeronautical information services (AIS), air traffic flow management (ATFM), meteorology (MET)) and airspace users as well as improve the common volcanic ash contingency plan for the EUR and NAT Regions.

4.9 The NAT SPG was presented with information regarding the intent to create a new ATS route to improve the flow of aircraft moving from north-eastern United States to Rio de Janeiro (Brazil), Sao Paulo (Brazil) and Buenos Aires (Argentina) and a recommendation that the details of ATS route L576 be included in the NAT Air Navigation Plan, Volume II (NAT eANP, Doc 9634, Vol II), Table ATM II-1. It was noted that the route continued further in the CARSAM Region and had already been inserted in Table ATM II-CARSAM-1 of the CARSAM Air Navigation Plan (CARSAM eANP, Doc 8733, Vol II).

4.10 The NAT SPG was provided with the updated NAT Air Navigation Plan (NAT eANP, Doc 9634) Volume III Tables providing a summary of the NAT progress on the planning and implementation of the ICAO Global Air Navigation Plan (GANP) and Aviation System Block Upgrades (ASBU). It was recalled that this work was carried out in follow up to NAT IMG Decision 48/01 that tasked NAT POG and NAT TIG to populate the dynamic part of the eANP and report to NAT IMG/50. The NAT SPG was also provided with the NAT GANP ASBU 2016 implementation report that was developed based on the NAT eANP Volume III Tables, ASBU, Air Navigation Report Forms (ANRF) and updated NAT Service Development Roadmap (NAT SDR) .

4.11 The meeting agreed to amend the North Atlantic Systems Planning Group (NAT SPG) Handbook (NAT Doc 001) with a new procedure regarding ICAO High Seas Coordination Procedure as provided at Appendix O to the Report; and the ICAO Regional Director, Europe and North Atlantic, urge States to ensure proper coordination of ATS route developments and airspace improvements in High Seas airspace in adherence with the approved Procedure.

## 5. **Twenty Seventh and Eighth meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/27 and APANPIRG/28) Bangkok, Thailand, 11 to 14 September 2017**

5.1 The Twenty Seventh Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/27) was held from 5 to 8 September 2016 and APANPIRG/28 from 11 to 14 September 2017. Under agenda item 1, APANPIRG/28 noted that the Fourth APANPIRG/RASG–APAC Coordination Meeting was held in Bangkok, Thailand, on 6 July 2017 and was attended by the APANPIRG Chair and Vice-Chair, RASG-APAC Chair, APRAST Co-Chair (States), Senior Officials from ICAO HQ and Secretariat. The meeting noted the following principles for coordination between APANPIRG & RASG-APAC:

- a) PIRG and RASG shall coordinate and support each other to achieve the agreed targets for the established regional priorities and implementation plans endorsed by the respective group (e.g. Review and support implementation of subsequent versions of the Asia/Pacific Seamless ATM Plan by the RASG);
- b) continuous coordination by Secretariat for both PIRG and RASG to avoid duplication and gaps and to ensure alignment and harmonization of priorities, plans and actions;
- c) secretariat will present a paper reporting on regional group coordination activities at each regional group plenary meeting and their key subsidiary bodies as appropriate;
- d) chairs of APANPIRG and RASG will attend a coordination meeting at the ICAO Regional Office once a year and hold periodic coordination web meetings in between the face-to-face meetings if deemed necessary;
- e) chairs will agree which regional group shall lead on each coordination topic and ensure coordination, information sharing and cross-reporting to the other group Chair, and if there is any change in lead regional group responsible, plan and ensure a smooth transition. Each group leading a coordination topic should identify any implications on the activities of the other group and highlight them to the other group and the Secretariat;
- f) safety management, safety oversight system and flight operations safety aspects will usually fall under the RASG;
- g) air navigation facilities and services implementation aspects will usually fall under the PIRG;
- h) areas of coordination between PIRG and RASG is primarily in AGA and ANS safety areas;
- i) OPS (Annex 6) deficiencies listed under ATM air navigation deficiencies will be shared with RASG for further monitoring and resolution if deemed necessary;
- j) cooperation to ensure that the priority ASBUs are implemented in the most efficient and safe manner.

5.2 APANPIRG/28 also noted that the Coordination Meeting reviewed the templates for reporting Conclusions/Decisions and agreed to expand the current template of Conclusion/Decision used in APANPIRG, RASG-APAC and their contributory bodies, to include references, such as, Working Paper (WP). APANPIRG/28 also noted that the APANPIRG was assigned lead regional group for activities, such as, “airspace contingency, natural disaster/crisis, conflict” in the region.

5.3 Recognizing the challenges faced in implementing SSP and Safety Management System (SMS) “commensurate with the size and complexity” of each organization and the wide range of service providers addressed by Annex 19, the ICAO Safety Management Implementation website as a complement to the 4th edition of the Safety Management Manual would include some examples currently found in the third edition of SMM (updated) and provide a mechanism for the sharing of multiple tools and examples. This will emphasize the need for an SSP or an SMS to be tailored to the specific needs of each State and service provider. In addition, as experience in the implementation of

safety management grows and the tools continue to evolve, the web-based format would allow for continuous update. States, regional and international organizations would be invited to share their examples beginning in October 2017.

5.4 The meeting was briefed about the developments regarding the Global Air Navigation Plan (GANP). The 2016 GANP includes the move to a six year cycle, performance-based approach and creation of a GANP webpage. The most comprehensive improvement will however come from the 2019 GANP which will introduce a four-tier layer approach that will include a global managerial level, Global technical level, a Regional and national plan layer. The 2019 GANP will also include the addition of the Basic Building Blocks (BBB) to the Aviation System Block Upgrades (ASBUs). The development of the 2019 GANP is currently in full flow.

5.5 The meeting was informed about the new developments in the Air Navigation Bureau at the ICAO Headquarters regarding improved Programmes Coordination and Implementation processes. To this end a new section, the Programmes Coordination and Implementation was established. This Section will be the single liaison between the ICAO HQ and the Regional Offices on the technical/operational level. In this capacity the meeting was informed about the efforts undertaken by this Section on improving the implementation facilitation. In this respect it was indicated that ICAO need to work in a more project oriented way, starting with the problem statement until the Regional coordination of implementation. Pertinent to this activity is that Global Plans (GANP and GASP) will form the main basis for prioritization of the projects to be undertaken. In order to ensure that any future SARPs will be better aligned with realistic implementation objectives, the Regional Offices will be involved in the project from the start. In light of the above, project oriented work-method, it was emphasized that appropriate feed-back loops are instrumental. The PIRGs would have an important role in providing potential recommendations on changes to the project. In this respect, the meeting was then made aware about the review of the TORs of the PIRGs/RASGs that will be discussed at the upcoming GLOBAL PIRG/RASG forum.

5.6 Singapore, United States and EUROCONTROL presented information on a joint project to develop harmonised measurement procedures for selected Key Performance Indicators (KPIs). These were intended to support benchmarking of Air Traffic Management (ATM) performance. WP20 provided an update on the project's Phase One results and demonstrated the benefits of performance benchmarking. In late 2016, the Fifth Edition of the ICAO Global Air Navigation Plan (GANP) identified 16 KPIs to measure the operational performance of Air Navigation Service Providers (ANSPs). Two of these KPIs were chosen for an initial comparative analysis at Singapore, United States and European airports: *Taxi-Out Additional Time* (GANP KPI02) and *Additional Time in Terminal Airspace* (GANP KPI08). WP20 urged States to support the Regional ATM Performance Measurement Framework Small Working Group (RAPMF/SWG) to develop a performance measurement framework aligned to the GANP, and taking into account the benchmarking work conducted by Singapore, United States and EUROCONTROL. Japan requested to join the Singapore, United States and EUROCONTROL performance measurement group. China stated that the appropriate forum to develop KPIs was the RAPMF/SWG. ICAO invited Singapore, United States and EUROCONTROL to work with the RAPMF/SWG, so the results of such collaboration could be reported to the ATM/SG, which would ultimately provide the outcomes to APANPIRG. Singapore emphasised the need for other States to become involved with the RAPMF/SWG – which was endorsed by APANPIRG.

5.7 The APANPIRG/28 meeting noted that the AOP/SG/1 reviewed the results of USOAP audits in AGA area in Asia Pacific Region and noted that there were 21 States in Asia and Pacific Regions with USOAP EI below 60% in aerodrome certification. The AOP/SG/1 urged the Champion States/Administrations to nominate their experts/advisors to the ICAO Regional Office in order to provide assistance to low EI States in AGA area. The AOP/SG/1 noted and expressed its appreciation to Hong Kong, China who had nominated an Expert. USA agreed to extend support to the APAC Region in organising workshops/seminars on Annex 14 requirements including course materials. In addition USA also agreed to support States on aerodrome certification and specific areas

by providing subject matter experts. The AOP/SG/1 meeting urged States which need assistance in specific areas should inform ICAO APAC Office.

5.8 The APANPIRG/28 meeting noted that the Fifth Meeting of the APANPIRG Air Traffic Management Sub-Group (ATM/SG/5) was held at the ICAO Regional Office, Bangkok, Thailand from 31 July to 04 August 2017. The meeting was attended by 102 and a total of 37 Working Papers (WP), 25 Information Papers (IP) and three flimsies were considered by the meeting. Five Draft Conclusions and two Draft Decisions were endorsed for consideration by APANPIRG/28. The ATM/SG/5 also agreed to ten Conclusions under the delegated authority vested in the Subgroup by APANPIRG for Conclusions that were of a technical or purely operational nature (note: no technical Decisions were made by the ATM/SG/5).

5.9 The meeting was informed of the outcomes from the First Meeting of the Asia/Pacific Unmanned Aircraft Systems Task Force (APUAS/TF/1, Bangkok, Thailand 03 to 05 April 2017). The ATM/SG/5 was informed of Decision APUAS/TF/1-1 – APUAS/TF/SWG, to form a small working group of experts who would draft the Asia/Pacific Regional Guidance for the Regulation and Safe Operation of Small Unmanned Aircraft. A second meeting of APUAS/TF had been tentatively planned in November 2017. However, there may be global developments arising from the Second Global Remotely-Piloted Aircraft Systems (RPAS) and DRONE ENABLE symposiums (Montreal, Canada, 19 – 23 September 2017) relating to defining a global framework for regulation of unmanned aircraft system (UAS) in a UAS traffic management systems (UTM) environment. Therefore, the ATM/SG/5 meeting noted that the APUAS/TF/2 would be deferred in order to avoid duplication of work that may be conducted at the global level, and to avoid any potential divergence between global and regional policies. A web resource of information relating to UAS had been developed, including a UAS Toolkit of information on operations, rules, guidelines and special authorizations. The resource was available on the ICAO website at <https://www4.icao.int/uastoolkit/home/about>.

5.10 IATA presented issues and concerns regarding the implementation of PBCS, globally and regionally, that required timely resolution before the planned implementation date and was supported by four APANPIRG/27 Conclusions. The ATM/SG/5 meeting noted a number of concerns by IATA on PBCS (especially lack of State readiness to issue operational approval for PBCS by 29 March 2018). An action item was noted for inclusion in the FIT-Asia Task List, relating to coordination with ICAO Headquarters and the ICAO NAT Region on the issues of operational approvals for legacy aircraft, the development of the proposed PBCS Charter, and consideration to further defer the agreed implementation date. The lack of responses to the survey discussed under FIT-Asia/6 WP/8, together with the items discussed under FIT-Asia/6 WP/9 and informal reports, indicated that few Asia/Pacific States had taken action to comply with *Conclusion APANPIRG/27-7: PBCS Operator Requirements*. Noting the potential ramifications for flights if the PBCS operational approvals had not been issued, and the burden on the ATM systems of other States in cases where such aircraft would be separated by non-performance-based horizontal minima, APANPIRG/28 developed a Conclusion to ensure that communication and surveillance requirements are continuously met and inform States of approval, FIT-Asia, RASMAG and APANPIRG accordingly.

5.11 APANPIRG/28 reviewed the outcomes of the Twenty First Meeting of the Communications, Navigation and Surveillance Sub-group (CNS SG/21) of APANPIRG held at the ICAO Regional Office, Bangkok, Thailand, from 17 to 21 July 2017 (WP/6). 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/21 and other papers presented under Agenda Item The meeting noted the full report of the SG and other meeting document were posted on the following webpage: <https://www.icao.int/APAC/Meetings/Pages/2017-CNS-SG21.aspx>

5.12 The First Meeting of the APAC SWIM Task Force (SWIM TF/1) was held in Bangkok in May 2017 and attended by 67 participants from 17 States/Administrations and International Organizations. The meeting noted the information on SWIM planning from 2017 to

2022, trials, demonstration and implementation presented by a number of States/Administrations at the Task Force meeting. The meeting also noted the robust program management approach and tasks assignment to task leads and members of the Task Force and the work plan agreed by the SWIM Task Force, including coordination mechanisms inside the region and with the concerned panels.

5.13 The ICAO Position on issues of critical concern to aviation which are on the agenda of the International Telecommunication Union (ITU) World Radiocommunication Conference (2019) (WRC-19) developed by the Frequency Spectrum Management Panel was approved by the Council at the eighth meeting of its 211th Session in June 2017. The State Letter for distribution of the ICAO position was issued on 14 July 2017. The approved ICAO position was also submitted to APT APG19-2 meeting. The executive summary of ICAO position is provided in Appendix A and the ICAO position for ITU WRC-19 is provided in Appendix B to CNS SG/21-WP/9. States were encouraged by CNS SG to update the list of focal points for WRC-2019 designated by States which is posted on ICAO APAC webpage.

5.14 Hong Kong China reported that in November 2016, the Hong Kong Civil Aviation Department commissioned their new Air Traffic Management System (ATMS) which has successfully demonstrated its performance in coping with the challenges of peak traffic demands during the holiday and adverse weather seasons. A risk-based approach was adopted throughout system development, testing/acceptance, system and operations transition, handling of teething issues with good lessons learned. Hong Kong China would pioneer forming an international Users' Group to share operational and technical experience, and map out the future system development roadmap. The meeting also encouraged those States/Administrations in a position to do so to organize a user's workshop or meeting to share their ATM system roadmaps, functionalities, and lessons learned.

5.16 The Secretariat presented the outcomes of the ICAO Competency-Based Training (CBT) Workshop for Air Traffic Controllers (ATCO) and Air Traffic Safety Electronics Personnel (ATSEP) which was held in Bangkok, Thailand from 19 to 21 June 2017, gathering a total of 72 participants from 15 States/Administrations. The workshop was facilitated by 7 instructors from CANI (Air Navigation Services of the Czech Republic, FAA, IFATCA, IFATSEA, NATCA (National Air Traffic Controllers Association in USA) and NATS (Air Navigation Services, United Kingdom), as a follow-up to Conclusion APANPIRG/27/47: Workshop on competency-based training and assessment for the ATSEP made by APANPIRG in 2016.

5.17 Based on APANPIRG/28 experience the meeting decided that future APANPIRG meetings be conducted for duration of three days.

5.19 The meeting was informed that a Global Forum on Regional Aviation Safety Groups (RASGs) and Planning and Implementation Regional Groups (PIRGs) will take place in Montreal on 13 December 2017 during GANIS/SANIS to discuss and define the future strategy path for these regional mechanisms. The First Vice-Chair will attend this Global Forum and will share the outcomes of the forum at APANPIRG/29. Then APANPIRG/29 may make an informed decision on the meeting cycle as well as need to conduct RASG/PIRG Meetings back to back or maintain the status quo.

**6. The Twenty First Meeting of the Africa-Indian Ocean Region (AFI) Planning and Implementation Regional Group (APIRG/21) was held back to back with the Fourth Regional Aviation Safety Group (RASG/AFI/4), from 9 to 11 October 2017**

6.1 The twenty first APIRG meeting was opened jointly with the fourth RASG-AFI meeting. The meeting recognized the need to develop national air navigation plans aligned with the regional and global plans and encouraged the development of a regional modernization programme in the AFI Region based on strategic air navigation regional performance objectives, aimed to materialize the performance-based approach adopted by the Region for the planning and implementation of new air navigation improvements. Furthermore, in order to support achievement of the above objectives, the meeting agreed on the following actions:

- a) redefine and adopt AFI Air Navigation Regional Performance Objectives;
- b) materialize the AFI Performance-based Approach to achieve the defined regional air navigation performance objectives in a Regional modernization Programme;
- c) reflect this performance-based approach in Volume III of the regional Air Navigation Plan;
- d) APIRG Secretariat to revise the AFI regional implementation strategy in the framework of the Regional modernization programme and APIRG Sub-Groups' activities;
- e) States to establish National Air Navigation Plan Multidisciplinary Teams, provided with the adequate resources, including training, to collaboratively develop and implement national air navigation plans initiatives;

6.2 APIRG/21 meeting noted the First Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group (AAO SG/1) was held in Dakar, Senegal, from 29 to 31 May 2017, attended by forty-six (46) participants from fourteen (14) States and two (2) Regional and International Organizations. The meeting focused on the operationalization of the new APIRG structure and operational methodology and addressed other matters of high priority. The meeting was informed that a *small working group (SWG)* had been established to complete the items on AAO SG/1 agenda, including APIRG conclusions and decisions applicable to the AAO/SG

6.3 The meeting noted with concern the slow progress in the implementation of the identified projects and the need to take remedial action but appreciated the progress of initiatives such as the aerodromes certification project in nineteen (19) AFI States, for 20 international aerodromes and runway safety programme implementation under the AFI Plan and other mechanisms.

6.4 The meeting noted with appreciation progress made by the East African Community (EAC) Partner States with regard to establish seamless operations airspace in the with the collective FIRs in which the Partner States are responsible for the provision of ATS. The meeting also acknowledged and recognized the benefits to be realized from implementation of such models airspace management by the EAC as well as initiatives in other sub-regions, which were in various stages of planning and implementation.

6.5 The APIRG/21 meeting noted that at the South Atlantic Group (SAT) meeting Paris, France 5-9 June 2017, AFI States involved in the EUR/SAM Corridor Task Force agreed on the application of 5 minutes longitudinal separation . Furthermore, the Group noted the establishment of a “mandate” affecting users operating in the NAT region by 29 March 2018, with regards to PBCS implementation, which requires readiness concerning, inter alia, State regulations for PBCS Operations approval and Statements of Compliance (SoC) from manufacturers for certain aircraft types.

6.6. The meeting recognized the impact of the said mandate on AFI air operators who operate in the airspace in which the mandate has been established, including the States of Operator's ability to effectively meet the operations approval requirements. The meeting further noted the obligations of AFI States with regard to airspaces in which data-link operations have been or are planned to be established, which would require effective planning, as well as regional harmonization in implementation.

6.7 Considering the forthcoming NAT PBCS mandate and OPS approval issue for African Carriers that operate in Europe and America, AFI States are encouraged to consider establishing a framework for PBCS OPS approval for their respective registered aircrafts that operate in NAT Region being done in the same context of the planned PBCS implementation in the NAT Region. The meeting acknowledged the need to establish prerequisite foundations before moving towards the implementation and agreed to conclusion 21/09 on PBCS planning, implementation and monitoring.

6.8 The meeting reviewed the outcome of the First meeting of the APIIRG Infrastructure and Information Management Sub Group (APIRG IIM SG/1) in the areas related to aeronautical Communications, Navigation, Surveillance (CNS) and Radiofrequency Spectrum, Aeronautical Information Management (AIM), Aeronautical Meteorology (MET) including planned actions for the operationalization of the IIM/SG. The meeting reviewed the regional projects identified by the IIM/SG and approved by the APIRG Projects Coordination Committee (APCC) in line with the AFI ANS regional priorities and targets, and the related ICAO ASBU prioritized modules identified by the AFI Region. Fourteen (14) regional projects were identified in areas of AIM(3), CNS & Spectrum(9) and MET(2). The meeting approved AFI IIM/SG regional projects and project teams attached at Appendices 3.3.1A to 3.3.1N and Appendices 3.3.2A to 3.3.2N to the meeting report.

6.9. With respect to the implementation of performance-based navigation (PBN), a global Air Navigation priority which is related to ASBU Block 0 modules such as B0-APTA, B0-CDO, B0-CCO, the APIRG/21 meeting was updated on the implementation of the African Flight Procedure Programme (AFPP), with the first phase launched on 2nd June 2014 and the second phase (Phase II) will start in 2018. The meeting noted that States commitment through signing of the updated Programme Document (under development) and payment of membership contributions including arrears is critical to its successful implementation.

6.10 The meeting recalled the issue of missing (loss or non-existence of) air traffic services messages and flight plans had been a perennial challenge posing safety risks for many years, and for which definitive long lasting solutions were yet to be implemented. Missing flight plans contributed to many ATS incidents including aircraft proximity (AIRPROX) with high risk of collision as well as deterioration in the regional RVSM Collision Risk Assessments.

6.11 The meeting discussed a number of solutions and mitigation that should be implemented to reduce the number of missing ATS Messages including flight plans and address the primary challenge of lack of or inconsistent implementation of the agreed measures. Where agreed measures had been implemented, by both ANSPs and users, significant improvements had been achieved. The Group urged States to review and implement the measures adopted as APIRG Conclusions at past meetings.

6.12 The meeting noted that many AFI States had implemented or are in the process of implementing ADS-B, Secondary Surveillance Radar (SSR) and Multilateration (MLAT) technologies including establishment of mandates on individual levels. However, concern was raised that in many cases, user were not involved in the planning for implementation of such technologies. Furthermore, ICAO guidance in Circular 326, concerning implementation of ground-based ADS-B or MLAT technologies, and principles of cost-relatedness in Document 9082 as well as Document 9161 were not effectively applied.

6.13 The meeting was briefed on the outcome of the Regional Awareness Seminar on the AFI Air Traffic Management (ATM) Volcanic Ash Contingency Plan (VACP), held from 4 to 7 September 2017, aimed at providing assistance in relation to volcanic ash pursuant to APIRG Conclusion 18/53. The meeting agreed that it was important to conduct regular volcanic ash exercises in the Region in order to practice and develop inter-agency response to volcanic activity, in order to maintain safety, regularity and efficiency of aviation in the event of a volcanic eruption.

## **7. ACTION BY THE MEETING**

7.1 The meeting is invited to note the information relevant in other PIRG meetings.