



INTERNATIONAL CIVIL AVIATION ORGANIZATION
South American Regional Office

FOURTH MEETING OF AIR NAVIGATION AND SAFETY
DIRECTORS OF THE SAM REGION

PRELIMINARY REPORT

Lima, Peru, 2 to 4 October 2017

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HISTORY OF THE MEETING

ii-1 PLACE AND DURATION OF THE MEETING

The Fourth Meeting of Air Navigation and Safety Directors of the SAM Region was held at the premises of the ICAO Regional Office in Lima, Peru, from 2 to 4 October 2017.

ii-2 OPENING CEREMONY AND OTHER MATTERS

Mr. Oscar Quesada, Acting Regional Director of the ICAO South American Office, greeted the participants and acknowledged their continuous support to the regional activities undertaken by the South American Regional Office, as well the continuous support of civil aviation authorities of the South American Region. Likewise, he highlighted that considering the positive experience obtained from the formulation and implementation of the Declaration of Bogota, in this meeting will be presented the early works of a regional plan for the sustainability of air transport in the SAM Region and a declaration for its implementation that would help to prioritize initiatives that generate a greater impact in the safe and orderly development of South American air transport.

ii-3 SCHEDULE, ORGANIZATION, WORKING METHODS, OFFICERS AND SECRETARIAT

The Meeting agreed to hold its sessions from 09:00 to 15:00 hours, with appropriate breaks. The Meeting decided to work as a single committee and in working groups.

Mr. Luiz Ricardo de Souza Nascimento, delegate from Brazil was elected as Chairman, and Mr. Lorenzo Sepulveda delegate from Chile was elected Vice-Chairman.

The Meeting had two Secretaries: Mr. Onofrio Smarrelli, Regional CNS Officer of the Lima Regional Office, on the part of air navigation, and Mr. Marcelo Ureña, Regional Safety Officer of the Lima Regional Office, in the safety area.

The Secretariat also reckoned with the support of all the Officers of the Lima Regional Office: Miss Verónica Chávez, Technical Assistance Officer, Mr. Jorge Armoa, Regional Aeronautical Information Management and Meteorology Officer, Mr. Fabio Salvatierra, Regional Officer for Aerodromes, Air Routes and Ground Aids, and Mr. Fernando Hermoza, ATM/SAR Regional Officer and Mr. Roberto Sosa ANS/SFTY Regional Officer.

ii-4 WORKING LANGUAGES

The working language of the Meeting was Spanish with simultaneous interpretation in English and its relevant documentation was presented in Spanish and English.

ii-5 **AGENDA**

The following Agenda was adopted:

- Agenda Item 1: Follow-up to the implementation of air navigation priorities
- Agenda Item 2: Follow-up to the implementation of safety oversight priorities
- Agenda Item 3: Results of the 39th Session of the ICAO Assembly (A/39)
- Agenda Item 4: Follow-up to GREPECAS and RASG-PA activities
- Agenda Item 5: Regional Plan for the sustainability of the air transport in the SAM Region
- Agenda Item 6: Other business

ii-6 **ATTENDANCE**

The Meeting was attended by 44 participants from 11 SAM States (Argentina, Brazil, Bolivia, Chile, Ecuador, Panama, Paraguay, Peru, Uruguay, Suriname and Venezuela), three representatives of United States, one delegate from CANSO and ICAO Officers. The list of participants appears on page iii-1.

ii-7 **LIST OF CONCLUSIONS AND RECOMMENDATIONS**

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Agenda Item 1: Follow-up to the implementation of air navigation priorities

1.1 Under this agenda item, the Meeting analysed WP/02 – *Follow-up to PBN implementation goals*, WP/03 – *ATFM PROJECT (ASBU: B0-SEQ, B0-FRTO, B0-NOPS and B0-ACDM)*, WP/04 – *Follow-up to AIM implementation goals*, WP/05 - *Follow-up to the implementation of AMHS interconnection and National IP Networks*, WP/06 - *Follow-up to the implementation of AIDC interconnection*, and WP/15 - *Follow-up to MET and AIM implementation priorities*, all presented by the Secretariat.

PBN implementation

1.2 Regarding PBN implementation goals, the Meeting took note of the availability of the PBN CONOPS document, which supported the implementation tasks of the Declaration of Bogota and provided a conceptual frame of reference for the SAM Performance-based air navigation implementation plan (SAM-PBIP).

1.3 Information was presented on progress made in the en-route segment for PBN implementation, describing the action taken by the ATSRO/8 meeting regarding version 4 of the route network, which made possible coordination amongst States to optimise at least 30 ATS routes in 2018. The delegate of Peru highlighted the results of the aforementioned meeting, and the opportunity for coordinating interregional routes thanks to the participation of Jamaica.

1.4 Note was taken of CO2 savings as of June 2017, corresponding to 93,516 tonnes of CO2 resulting from route and flight procedure optimisation.

1.5 Regarding PBN implementation in TMAs, the Region exceeded the goals of the Declaration of Bogota, reaching 72.5% implementation of SID/STAR routes in TMAs. The Meeting also took note of the progress made in the implementation of the Asuncion TMAs last August, the Bogota TMA as of 12 October, and in the case of Brazil, the seven TMAs within the Curitiba FIR (Project SUL). The implementation of CCO/CDO methods for standard departures/arrivals was still underway, reaching 22% and 26% according to follow-up by the Secretariat. Regarding the implementation of APV/LNAV or RNP AR approaches, 79% of runway thresholds of international airports had been equipped as of October 2017.

1.6 Regarding PBN implementation, the delegate of Brazil noted that it was a far-reaching project since it involved the update and/or implementation of more than 300 flight procedures, most of them under the PBN concept that would result in savings estimated in 7,000 tonnes of CO2. Accordingly, the States had to make and communicate the calculation of these environmental benefits resulting from PBN implementation. In turn, the delegate of Venezuela described the progress made in PBN implementation in the Maiquetía FIR, where full PBN implementation had been achieved in TMAs.

1.7 The Meeting agreed on the need to continue with PBN implementation activities in the Region, as formulated in the Declaration of Bogota, both en-route as well as in the TMAs and approaches to IFR runway, and to promote the implementation of CCO and CDO concepts, including performance measurements and post-implementation analyses, in collaboration with aircraft operators.

ATFM implementation

1.8 The Meeting took note of the status of implementation of air traffic flow management (ATFM) in the Region, which showed 85% implementation for States that had installed FMPs/FMUs at their ACCs, as foreseen in the Declaration of Bogota.

1.9 Likewise, note was taken of the progress made by States in runway capacity calculations and, separately, in ATS sector capacity calculations. The representative of Uruguay informed the Secretariat that these calculations had already been published in the GEN section of the State AIP, and provided the corresponding information for updating the follow-up table.

1.10 Pursuant to Conclusion SAM/IG/19-01, States were reminded of their commitment to strengthen the functions of flow management positions (FMPs) or units (FMUs), providing them with resources and trained personnel, and the capacity to coordinate the implementation of ATFM initiatives (TMIs) with ATS services, in cases of air traffic capacity/demand imbalance. It also agreed that States that had not done it yet should double their efforts to implement at least one ATFM position (FMP) in each FIR.

AIM implementation

1.11 The Meeting took note of the status of implementation of the steps in Phase 1 of the Roadmap for the transition from AIS to AIM. In this regard, the Meeting noted that, out of the four steps in the first phase (Consolidation), the one related to the implementation and certification of a quality management system (QMS) had experienced delays in some States.

1.12 The Meeting felt that QMS implementation was facing a new scenario because ISO 9001, which was the basis for QMS, had undergone changes as of September 2015, since new requirements for the States had been introduced. Furthermore, the meeting took note that all certifications issued under version 2008 of ISO 9001 would expire in September 2018.

1.13 The Meeting expressed its concern for the delays in Bolivia, Guyana and Suriname. It also noted that Colombia, Ecuador and Venezuela should make an additional effort to complete the implementation of the AIM/QMS, since they were already at a quite advanced stage. A general description of AIM/QMS implementation is provided in the table shown in **Appendix A¹** to this agenda item.

AIS and MET implementation - Period 2017-2019

1.14 The Meeting took note of the review of AIM and MET implementation priorities for the period 2017-2019. The Meeting recalled that these priorities had been defined at the AN&FS/2 meeting and had been endorsed by the RAAC/14 meeting.

1.15 Regarding AIM, the Secretariat stated that progress had been made in AIXM implementation, but not as expected. However, in relation to e-TOD, progress made in Argentina, Brazil, Paraguay and Chile did not cover all international airports, which generated concern, especially because the standard was effective on 12 November 2015. Furthermore, regarding the implementation of the digital NOTAM, the Meeting deemed it important to modify the implementation target date of this element to early 2019, as a starting point.

¹ See table in paragraph 2.4 of WP/04

1.16 Concerning the MET area, implementation delays were noted in the MET/QMS, where States had not made significant progress since the previous year. Another great concern was the lack of procedures in case of release of radioactive material. The Meeting deemed it important to urge States to coordinate between the MET and ANS areas and develop procedures for such cases.

AMHS interconnection implementation

1.17 The Meeting took note of the significant progress made in the implementation of AMHS interconnections since the AN&FS/3 meeting, highlighting the operational implementation of AMHS interconnections between Brasilia and Bogota (May 2017), Brasilia and Montevideo (September 2017), Lima and Santiago (December 2016), the implementation and operational start-up of the AMHS interconnection between the Brasilia MTA and the Madrid MTA (September 2017)--the first interregional AMHS interconnection in the SAM Region, implemented through CAFSAT, the AFI/SAM/EUR VSAT network that carries voice and data services in support of air navigation in the SAT (South Atlantic) Region--, and the AMHS interconnection between the Brasilia MTA and the SITA Gateway.

1.18 The Meeting also took note that positive operational interconnection tests had been conducted between the Ezeiza MTA and the Lima MTA, the Brasilia MTA and the Ezeiza MTA, the Ezeiza MTA and the Santiago MTA, the Bogota MTA and the Panama MTA, and between the Ezeiza MTA and the Spain MTA, through an MPLS circuit leased from local communication providers.

1.19 The delegate of Venezuela informed that the new AMHS system started operating on 20 September 2017 and, in that regard, aeronautical information circular C03/A03 had been published on 14 September 2017. Thus, it was noted that the implementation of AMHS interconnections would be resumed.

1.20 The Meeting took note that, according to the Declaration of Bogota, the goal was to implement 26 AMHS interconnections by the end of 2016. So far, 14 AMHS interconnections had been implemented, 10 of which were in the operational phase and the remaining were in the pre-operational phase, waiting for the States to migrate to the operational phase, with 58% implementation. According to the table shown in **Appendix B²** to this agenda item, AMHS interconnections were to be completed by June 2019, including the 26 contemplated in the Declaration of Bogota, in addition to the remaining AMHS interconnections included in Table CNS II-1 of Volume II of the CAR/SAM Air Navigation Plan (Doc 8733). **Appendix C³** contains the updated list of focal points for the implementation of the AMHS interconnection.

1.21 The Meeting was reminded that any changes made by a State to AMHS addressing must be communicated to the EUROCONTROL ATS messaging management centre (AMC), in accordance with the procedure established in ICAO State Letter AN 7/49.1-09/34 of 14 April 2009. According to this procedure, the communication to the AMC must come from an external operator nominated by the State.

1.22 The Meeting took note that not all the States of the Region had nominated or updated their candidates for the AMC. Registration may be done at the following website <http://www.eurocontrol.int/amc>. In this regard, the SAM/IG meeting formulated Conclusion SAM/18/02 *Nomination and registration of SAM candidates for EUROCONTROL AMC*.

Implementation of national IP networks

² See Appendix B to WP/05

³ See Appendix A to WP/05

1.23 The Meeting took note that, regarding the implementation of national IP networks, these had been already implemented in Argentina, Brazil, Colombia, Chile, Ecuador, Paraguay, Uruguay and Venezuela. This accounted for 62% of the 80% implementation foreseen by the end of 2016 in the Declaration of Bogota. It was expected to achieve 100% implementation for the period 2018-2019. See the table depicting the current and foreseen status of implementation of national IP networks in **Appendix D**⁴ to this part of the report.

Implementation of AIDC and surveillance data exchange

1.24 The Meeting took note that no progress has been made in the implementation of new AIDC interconnections since the AN&FS/3 meeting. At present, the only operational AIDC interconnections were those implemented between domestic ACCs of Brazil (6). The AIDC interconnection between the Lima ACC and the Guayaquil ACC went from the operational to the pre-operational phase, due to the modernisation of the ATM automation system of the Lima ACC, which is to be completed at the beginning of the fourth quarter of 2017. **Appendix E**⁵ to this agenda item contains a table with AIDC interconnection requirements and their status of implementation and estimated implementation dates, and **Appendix F**⁶ contains the updated list of focal points in charge with coordinating AIDC implementation.

1.25 The Meeting noted that, amongst the activities carried out, mention should be made of the analysis of flight plan errors and duplication/multiplicity, which generated errors in the associated AIDC messages. In this regard, it was noted that the AIDC group had developed a Guide to avoid errors in FPLs and associated ATS messages, had formulated recommendations to mitigate flight plan errors and duplication/multiplicity, and had established a procedure to mitigate flight plan errors and duplication/multiplicity. Accordingly, the SAM/IG/19 meeting had formulated Conclusion SAM/19-2 *Implementation of procedure to mitigate the duplication/multiplicity of commercial scheduled flight plans*.

1.26 For purposes of mitigating flight plan errors, the Meeting noted that failure to implement automated systems pursuant to Amendment 1 to Edition 15 of Doc 4444 (FPL2012) contributed to the introduction of errors in the flight plan format and, therefore, in messages associated to the AIDC. At present, out of all the ACCs in the SAM Region (27), 67% had implemented the update in flight plan processors (FDP), 22% continued using converters, and the remainder still applied the manual solution in view of the fact that automated systems installed in the ACCs were not compliant with FPL 2012 or such automated systems did not exist. Regarding the implementation of AMHS/AFTN terminals containing FPL 2012 templates capable of identifying completion errors, 67% of the States already had them. **Appendix G**⁷ contains a detailed table on the status of implementation of automation in compliance with amendment 1 to Edition 75 of Doc 4444.

1.27 The Meeting took note that coordination had started between Argentina and Chile for the exchange of surveillance data (secondary radar). This coordination had been interrupted because Chile had to acquire and install software for filtering the surveillance data information used by the military so as to exclude it from the exchange. The technical-operational activities for the implementation of the exchange of radar and flight plan data (AIDC) between Argentina and Chile were contemplated in an MoU that had been signed between the authorities of Argentina and Chile on 18 October 2010. A teleconference will take place between the Secretariat (ICAO), Argentina and Chile on 11 October 2017

⁴ See Appendix C to WP/05

⁵ See Appendix A to WP/06

⁶ See Appendix B to WP/06

⁷ See Appendix C to WP/06

to define a new action plan for the implementation of the interconnection of surveillance and flight plan data.

1.28 The Meeting recalled that between 2010 and 2012, MoUs had been established and signed between Argentina and Brazil, Argentina and Uruguay, Brazil and Uruguay, Brazil and Venezuela, and Brazil and Peru for the exchange of surveillance and flight plan data, in order to increase air traffic control assurance in transfer areas between adjacent ACCs. Of the activities contemplated in the MoUs, at present, work was only being carried out in AIDC implementation; the surveillance data exchange had been interrupted because it had not been possible to use certain communication protocols (Asterix). In this sense, the Meeting felt that the States involved in the MoUs should resume activities for the implementation of surveillance data exchange.

Agenda Item 2: Follow-up to the implementation of safety oversight priorities

2.2.1 Under this agenda item the following papers presented by the Secretariat were analysed: WP/07 – *Follow-up on goals concerning safety oversight, accidents and runway excursions*; WP/08 – *Follow-up to airdrome certification goals*; WP/09 – *Follow-up to goals related to the implementation of the State Safety Programme (SSP) and the Safety Management System (SMS)*; and IP/03 – *Global Aviation Safety Plan (GASP), SAM Safety Plan and State Safety Plan*.

2.2 WP/07 - FOLLOW-UP ON GOALS CONCERNING SAFETY OVERSIGHT, ACCIDENTS AND RUNWAY EXCURSIONS

2.2.1 Under this agenda item, the Meeting took note on goals of the Declaration of Bogota and the results concerning safety oversight, accidents and runway excursions, according to the following detail:

Safety: Attain 80% effective implementation (EI) in the SAM Region

2.2.2 Between November 2011 and August 2017, ICAO held four (4) CMA audits, 13 ICAO coordinated validation missions (ICVMs) and four (4) off-site activities in the SAM Region. During this period of time, 12 out of the 13 that had any USOAP CMA activity showed major improvements in the effective implementation of ICAO SARPs

2.2.3 Based on the results obtained presented in the table below, the average for the SAM Region increased from de 66.28% a 76.62% (+10,34%) from November 2011 to August 2017, leaving 3.38 % still to be improved to achieve de Declaration of Bogota goal established for the end of 2016. With this rate of +10.34, the SAM Region improved its EI in **1.47** annually.

2.2.4 Considering ICVM Panama preliminary results, held from 19 to 28 September 2017, SAM Region would increase its EI to **78.72 %** up to the end of 2017.

Accidents: Reduce the accident rate gap of the SAM Region by 50% with respect to the global accident rate.

2.2.5 According to the table below, containing information collected from ICAO iSTARS-3 application, the accident rate in South America for scheduled commercial air transport operations with aircraft of more than 5 700 kg has been gradually dropping until reaching a rate of **1.03** accidents in 2015 for every 1.000.000 departures, quite below the global rate of **2.78**. In spite of the above, in 2016 SAM Region showed a considerable increase by occurrence, pulling up accident rate from **1.03** in 2015 to **3.25** in 2016, maintained below the global rate of **3.74** for a consecutive second year.

Runway excursions: Reduce the rate of runway excursions by 20% with respect to the average rate of the SAM Region (2007-2012).

2.2.6 The average rate of runway excursions between 2007 and 2012 was 2.24 accidents per million departures. The 20% reduction goal represents 1.8 accidents per million departures.

2.2.7 Based on information provided by ICAO iSTARS-3 and presented in the table showed below, the average rate of runway excursions (RE) indicates a gradual decrease of these accidents since 2007, with the exception of 2011 and 2013. In 2016 this rate increased considerably from 0.51 to **2.1**, exceeding the Declaration of Bogota goal for this year.

2.2.8 The Meeting commented about the importance to consider goals fragility due to their low values, which is positive in one side but any accident would cause a big variation. Also, special attention should be given to the adequate registration of departures number in order that indices are reflected more precisely.

2.3 WP/08 - FOLLOW-UP TO AERODROME CERTIFICATION GOALS

2.3.1 Under this agenda item WP/08 was presented, where challenges and measures adopted for aerodromes certification which goal in the Declaration of Bogota was to reach 20% duly certified international aerodromes in South American region (Doc. 8733 – ICAO CAR/SAM Regions Air Navigation Plan). Up to September 2017 the number of certified aerodromes was increased to twenty-five (25), from twenty-one (21) reported during the last AN&FS/3 meeting. It is important to point out that, when the goal of 20% certified aerodromes to be reached in 2013 was established, the number of international aerodromes that figured in Doc. 8733 was 100, number that has been increased to 104 at the present.

2.3.2 The results of a survey carried out with the States on the application of exemption mechanisms as a mean to facilitate aerodrome certification where SARPS non-compliance prevail. During the presentation it was emphasized that few States put into practice the exemption mechanisms. Therefore the Regional Office is carrying out activities (three in 2017) to support States to determine parameters to request and approve this analysis, as well as to identify the most common problems that can be solved through this analysis

2.3.3 On the other hand, the survey also asked about the main challenges faced by the CAA for aerodrome certification. Under this agenda item, the Meeting considered that the survey shown mixed results that can be analysed from different points of view, and that could not clearly identify the root cause of problems for aerodrome certification in each of the States. For example, a State commented that the problem, more than lack of personnel, is due to the lack of knowledge of the process. Other State commented that the clauses established in the concession contracts could be the principal barrier. Discussions also indicated that the State decision to grant an international condition to aerodromes that do not have international operations (due to social or political reasons), represents a big load to comply with the requirement. In conclusion, each State could have its own problems that might not be clearly identified in the survey.

2.3.4 After WP08 was presented, the Meeting considered that each State in order to strengthen the survey results develop an internal analysis to identify the root cause of aerodrome certification problems. This diagnosis could be used by the Secretariat to prepare orientation guidelines addressed to CAA Directors, indicating the specific measures that need to be taken, aligned with the aerodrome certification regional strategy in order to comply with the certification requirement and, intis way, be more precise in its commitment to deliver an implementation plan addressing the requirement (suggested by the Secretariat) that could be used as mechanism for the States to have clearer goals for the implementation based on its own weigh with respect to the regional average, which should be included in a later date. Therefore, it was convened to ad opt the following recommendations:

RECOMMENDATION AN&FS/4-01 – STATES INTERNAL ANALYSIS WITH RESPECT TO AERODROME CERTIFICATION

To request the States to submit to the Secretariat the explanation of the principal challenges they had to face for not having completed their aerodromes certification for 30 November 2017 de 2017.

RECOMENDACIÓN AN&FS/4-02 – ORIENTATION GUIDELINES FOR CAA REGARDING AERODROME CERTIFICATION

To request the Secretariat to make available high level orientation texts (DGCA/DFS), based in the results of Recommendation AN&FS/4-01, to be used as a guide for the actions to be taken by the CAA to achieve their aerodromes certification.

2.4 WP/09 - FOLLOW-UP TO GOALS RELATED TO THE IMPLEMENTATION OF THE STATE SAFETY PROGRAMME (SSP) AND THE SAFETY MANAGEMENT SYSTEM (SMS)

2.4.1 Following the agenda items, the Meeting was informed about the progress of SSP and SMS implementation in the following way:

2.4.2 *State safety programme (SSP)*. - The SAM Office established the meetings on SSP implementation starting in 2013. The fifth meeting on SSP implementation, held in Lima, Peru on 7-11 November 2016, analysed the status of SSP implementation in SAM States.

2.4.3 At that meeting, some States showed more progress than others. Accordingly, it was agreed to start programme implementation from the first element of the first SSP implementation phase, seeking a mechanism to allow all States to proceed at the same pace. In this regard, Bolivia, Chile, Colombia, Ecuador, Panama, Peru, and Venezuela expressed their intention to participate in a pilot project for SSP implementation until the end of 2018. Colombia joined the pilot project once the USOAP CMA audit conducted by ICAO on 5-15 June 2017 had been completed.

2.4.4 The pilot project for SSP implementation in SAM States was launched on 16 March 2017, with the seven (7) aforementioned States. Subsequently, Guyana requested to join the project, thus becoming the eighth member of the pilot project.

2.4.5 The objective of the pilot project is to develop legislation, regulations, guidance material, processes, mechanisms, and model systems related to safety management to support SAM States in the implementation of SSP within a period of two years.

2.4.6 The pilot project comprises fifteen (15) projects and one (1) general project, which will be executed until the end of 2018, ensuring implementation in the eight (8) aforementioned States and in the remaining SAM States that may wish to participate therein.

2.4.7 At present, the 16 working groups are developing their programme of activities in support of SSP implementation in the SAM Region..

2.4.8 **Appendix A**¹ contains the list of participants of the SSP pilot project working groups, and **Appendix B** shows the deliverables of each working group.

2.4.9 In order to ensure SSP implementation in the eight States participating in the pilot project, said States agreed to follow the SSP implementation plan shown in Appendix C to this working paper. According to the timetable of this plan, seven (7) of the States participating in the pilot project have already delivered the first element of Phase 1, related to the designation of the SSP appropriate organisation and accountable executive.

2.4.10 In order to meet the first strategic objective of the SAM safety plan, and in line with the provisions of Annex 19, the ICAO South American Regional Office will consult the States that are not participating in the pilot project (Argentina, Brazil, Paraguay, Suriname, and Uruguay) regarding the submission of their SSP implementation plans by December 2020. However, it should be noted that the second edition of Annex 19 is to become effective on **7 November 2019**

2.4.11 As part of the SSP Pilot Project, the Secretariat considered that this project member States should improve the internal communication of their Civil Aviation Authorities to integrate the ANS safety oversight units within the SSP tasks, specifically ATS, considering that part of this units responsibilities is the acceptance and oversight of the SMS of their ATS services suppliers. Tasks being developed as part of the SSP pilot project would support ANS oversight unit to comply with responsibilities derived from Annexes 11 and 19, and Doc. 9859.

2.4.12 **Safety Management System (SMS).**- Once the SAM States implement the SSP, the SMS will be measured in each of them.

2.4.13 The meeting agreed on the importance of participating in the SSP implementation pilot project, and invited the States that are not yet participating in the project to consider their adherence to the project as soon as possible in view of the great benefits offered to the States by the project

2.4.14 When analysing the need to amend the State basic aeronautical law to include the SSP implementation as a role of the Civil Aviation Authority (CAA), the Meeting argued that according to the fourth edition of Doc 9859, to be published soon, this issue depends of the legal system of each State, and that some States have considered that the SSP implementation is already implicit as one of the present CAA responsibilities, therefore, they do not need this specific empowerment. In such cases, the evidence of the SSP implementation should be clearly available in the State formal documents, and these should show a clear commitment with the State functional responsibilities regarding safety management described in Annex 19. Regarding this matter, the Secretariat was asked to request clarification to ICAO HQ about the status of the referred requirement.

2.5 IP/03 – GLOBAL AVIATION SAFETY PLAN (GASP), SAM SAFETY PLAN AND STATE SAFETY PLAN

2.5.1 The Secretariat shared with the Meeting the content and nature of the Global Aviation Safety Plan (GASP) 2017-2019.

2.5.2 The GASP defines the strategy for prioritising and continuously improving aviation safety. The GASP contains the framework for the development and implementation of regional, sub-regional and national safety plans. Through the GASP, ICAO promotes the

¹ Please refer to Appendices A and B of WP/09

harmonisation and coordination of efforts towards the enhancement of international civil aviation safety.

2.5.3 The general purpose of the GASP is to provide a harmonised guide for the development of regional and State safety plans, supported by regional safety activities, coordinated by the regional safety groups (RASGs). The GASP seeks to support the States and the Regions with the policies, planning and implementation of safety aspects through:

- the establishment of global safety priorities and GASP objectives;
- the provision of a planning framework, timetables and guidance material; and
- implementation strategies and a global roadmap with procedures and methods for achieving GASP objectives and for defining specific priorities at regional and State level, and also defining the role of industry.

2.5.4 The GASP sets forth the objectives to be achieved by States through the implementation of effective safety oversight systems, State safety programmes (SSP) and the development of advanced safety oversight systems that include predictive risk management. The GASP also defines a timetable for the attainment of short-, medium- and long-term objectives at global level.

2.5.5 **Global roadmap**

2.3.1 The global roadmap is an action plan that has been developed in order to assist the aeronautical community to achieve GASP objectives. It provides a structured frame of reference for all stakeholders. The objective of the roadmap is to make sure that safety initiatives provide the expected benefits associated to GASP objectives through better coordination, thus reducing inconsistencies and duplication of efforts. The GASP contains instructions for using the roadmap and facilitating its implementation.

2.5.6 **GASP Study Group (GASPSG)**

The GASPSG is an ICAO study group that develops and maintains the GASP and provides guidance for harmonised development of regional and State safety plans, with the support of regional safety activities coordinated by the regional aviation safety groups (RASGs). The GASPSG seeks to assist States and the Regions in their respective safety policies, planning and implementation, providing specialised advice to the ICAO Secretariat. It consists of experts from civil aviation authorities, airlines, aircraft manufacturers and international organisations. The ICAO South American Regional Office and the Regional Safety Oversight Cooperation System (SRVSOP) form part of the GASPSG to ensure regional representation and to make sure that relevant regional aspects are contemplated in the GASP.

2.5.7 **The GASP and the regional and national safety plans**

While the GASP offers a global perspective, its content might need to be adjusted to meet regional or national requirements. Regional and national safety plans should be consistent with the GASP. Regional and national safety policies should be adjusted based on the issues facing the States concerned.

2.5.8 **SAM safety plan**

The SAM Safety Plan (SAMSP) provides for the implementation of safety management based on three priorities: improving effective implementation (EI) within the framework of the ICAO universal safety oversight audit programme (USOAP) continuous monitoring approach (CMA); implementing the State safety programme (SSP); and reducing the accident rate in high-risk categories identified in the South American Region (SAM). This plan corresponds to the safety pillar of the Agenda

2035 for air transport in South America contained in the SAM Plan. The objectives of the SAMSP are consistent with the objectives of the Global aviation safety plan (GASP).

2.5.9 Within the framework of the Agenda 2035 for the development of air transport in South America (SAM Plan), the South American safety plan (SAMSP) has been developed taking into account the latest revision to the Global aviation safety plan (GASP), and falls within the scope of a preventive strategy for improving safety performance in the South American (SAM) Region. This preventive safety strategy is based on the implementation of a State safety programme (SSP) that systematically addresses risk and the effective implementation and continuous improvement of the eight (8) critical elements (CEs) of the safety oversight system.

2.5.10 The plan is aimed at establishing a safety management implementation strategy in the SAM Region, based primarily on GASP guidelines, the provisions of Annex 19 and other safety-related Annexes, and guidance provided in Doc 9859 – Safety management manual (SMM).

2.5.11 The document contains the SAM vision concerning safety management, assigning high priority to safety, the sustainability of operations, environmental protection, and training.

2.5.12 **State safety plan**

Each State will develop a safety plan. In this plan, the State will define the policy, guidelines, objectives, indicators, goals, and alert levels, in accordance with the guidelines, objectives, indicators, and goals established in the SAMSP. Development will depend on the level of maturity of the State with respect to the implementation of a safety management system that integrates the eight critical elements (CEs) of the safety oversight system with SSP provisions.

2.5.13 The State safety plan will include:

- the CAP, describing the activities to be carried out by the State in order to meet the objectives and goals of its safety plan with respect to EI improvement, or the plan for updating the PQs based on the percentage of EI obtained by each State in the USOAP CMA;
- the SSP implementation plan, describing the implementation phases and elements; and
- mitigation plans for managing risk and preventing accidents.

2.5.14 The State safety plan and its corresponding sections will be submitted to the ICAO South American Regional Office for control and oversight.

2.5.15 In response to the concerns expressed at the Meeting, the Secretariat explained that the SAMSP formalizes the activities that the SAM Office has been carrying out throughout the last few years to support States in improving effective implementation of the SARPs; implementing the SSP; and defining accident mitigation and prevention strategies. Within this context, SAM States are expected to develop their national safety plans based on the SAMSP. It was also explained that the SAMSP would include a model State safety plan.

2.5.16 Finally, the Meeting noted that, as planned, working groups would be created in each axis of the SAM plan, including the safety group that would be in charge of analysing the first draft SAMSP during the first quarter of 2018.

Agenda Item 3: Results of the 39th Session of the ICAO Assembly (A/39)

3.1 Under this agenda item, the Meeting reviewed WP/10 – *Results of the 39th Session of the ICAO Assembly regarding air navigation activities*; WP/11 - *Results of the analysis of working papers on safety submitted by the SAM Region to the A/19*, presented by the Secretariat and WP/17 – *Project Loon – floating cell phone towers in the sky*, presented by CANSO.

Results of the analysis of working papers on air navigation submitted to A39

3.2 The Meeting recalled that the AN&FS/3 meeting had agreed that the contribution of the SAM Region to the A39 would consist of three working papers, one on agenda item 15 – Technical cooperation and technical cooperation activities (WP/292, *Regional technical cooperation projects in the South American Region*, prepared by Peru and endorsed by all SAM States); one on agenda item 26 - Multilingualism at ICAO (WP/355, *ICAO policy on language services*, presented by Colombia and supported by the Latin American Civil Aviation Commission, LACAC); and the last one on agenda item 33 – Aviation safety and air navigation – Control and analysis (WP/113, *Compliance with the Declaration of Bogota*, presented by Chile and endorsed by all SAM States). Agenda items 15 and 26 were analysed by the Executive Committee, while agenda item 33 was reviewed by the A39 Technical Commission.

3.3 The Meeting took note that, under agenda item 15, and based on WP/292 and others presented under this agenda item, the Committee had recommended that the Assembly encourage ICAO member States to work together towards the common objectives through the execution of regional and sub-regional technical cooperation projects. In this sense, the Assembly approved two resolutions, Resolution A39-16 *Consolidated statement of ICAO policies on technical cooperation and technical assistance*, and Resolution A39-17 *ICAO Programme for Aviation Volunteers*.

3.4 Under Agenda Item 26, Multilingualism at ICAO, WP/355 *ICAO policy on language services*, presented by Colombia and supported by the Latin American Civil Aviation Commission – LACAC, together with WP/43 presented by the ICAO Council, and WP/357 *Multilingualism – one of the fundamental principles to achieve the goals of ICAO as a specialized agency of the United Nations*, presented by the Russian Federation, contributed to recognition by the Committee that language services, which are part of all ICAO programmes, were essential for all the Strategic Objectives of the Organization, and for global implementation of the SARPs and PANS, and that they were a requirement for the initiative *No country left behind* (NCLB). It also recognised the support provided by several countries for the translation of ICAO website into various languages.

3.5 In this sense, the Meeting took note that the Committee had recommended that the Assembly:

- 1) request the Council to closely monitor the implementation of the policies and decisions it has adopted to enhance efficiency and effectiveness on language service matters, recognizing multilingualism as a fundamental principle to achieve ICAO goals; and
- 2) request the Council to further analyse and reassess the resources required to ensure that ICAO documentation related to the implementation of standards is available on a timely basis in all ICAO working languages, and to further review the level of outsourcing required for these objectives, whilst taking into consideration the best practice of other similar UN organizations.

3.6 The Meeting took note that the Technical Commission, *inter alia*, had examined A39-WP/113 *Compliance with the Declaration of Bogota*, presented by Chile and supported by Argentina, Bolivia (Estado Plurinacional de), Brazil, Colombia, Ecuador, Guyana, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela (República Bolivariana de), that included a report on the progress made in the implementation of safety and air navigation goals established for 2016 in the Declaration of Bogota.

3.7 The Meeting took note that, based on the analysis of WP/113, the Commission had recommended that, taking into account the needs of South American States, the Council consider the development of a national or regional accident and incident classification and data validation system. Such system should allow for the classification of occurrences based on their causes and contributing factors, bearing in mind existing priorities financed under the 2017-2019 budget and the availability of extra budgetary resources.

Other A39 resolutions on air navigation

3.8 The Meeting took note of important A39 resolutions on air navigation, such as Resolution A39-12 *ICAO global planning for safety and air navigation*, Resolution A39-19 *Addressing cybersecurity*, and Resolution A39-22 – *Formulation and implementation of standards and recommended practices (SARPs) and procedures for air navigation services (PANS) and notification of differences*.

3.9 Regarding Resolution A39-12, the Meeting took note that the Assembly had endorsed the second edition of The Global Aviation Safety Plan (GASP) and the fifth edition of the Global Air Navigation Plan (GANP) (Doc. 9750), to serve as global strategic guidance for safety and air navigation respectively, and that both plans GASP and GANP served as a framework for the drafting and implementation of regional, sub-regional and national implementation plans, thus ensuring the harmonization and coordination of efforts to enhance the safety, capacity and efficiency of international civil aviation.

3.10 In this regard, the Meeting took note that, pursuant to Resolution A39-12, the SAM Region had amended the SAM Regional performance-based air navigation implementation plan, version 1.5 (PBIP), and had developed the SAM Regional safety plan.

3.11 In this sense, the Meeting considered that SAM States that had already developed their national performance-based air navigation plan within the framework of the ASBU, should update it in order to align it with the fifth edition of the GANP and version 1.5 of the PBIP, and those States that had not yet drafted their national air navigation plan should do so in compliance with GREPECAS Conclusion 17/6.

3.12 Through Resolution A39-19, States were advised of cyber-threats and their intent to cause harm, seeking to disrupt activities and steal information for political, economic or other reasons, and that these threats could easily evolve to affect critical civil aviation systems worldwide. It was also noted that there were cyber-threats affecting civil aviation safety that were not related to unlawful and/or deliberate acts, and therefore should be resolved through the implementation of safety management systems.

3.13 The Meeting took note that the SAM Region had conducted a study on the security of the South American digital network REDDIG II, and that action had been taken to mitigate external and internal threats to the network. In this regard, the Meeting felt that SAM States should identify those systems that might be affected by a cyber-attack and establish measures to mitigate such threats.

3.14 Regarding Resolution A39-22, the Meeting took note that it provided guidelines on the formulation of SARPs and PANS, amendments and their implementation by States, and on mandatory notification of non-compliance with ICAO standards.

3.15 In this regard, the Meeting considered that States should publish any significant difference in their aeronautical information publication (AIP) and use the electronic filing of differences (EFOD) to notify their differences to ICAO.

Results of the analysis of working papers on safety submitted to A39

3.16 Under this agenda item, the Meeting took note of the drafting and results of the working papers (WPs) submitted by the SAM Region to the 39th Session of the ICAO Assembly (A/39).

3.17 In order to assist SAM States in the preparation for A39, the SAM Office organised *web* teleconferences on safety. These teleconferences were led by the SAM Safety Officer, with the participation of the Safety Directors and their representatives, on behalf of the States.

3.18 A summary follows of the six (6) working papers submitted to A39 and the results obtained:

Establishment and management of the AIG Regional Cooperation Mechanism (ARCM) of South America (WP/102)

3.19 This working paper addressed the establishment of the AIG Regional Cooperation Mechanism (ARCM) of South America and the progress made in conforming this as a body in support of aircraft accident and incident investigation and safety improvement in the Region. In this regard, the Assembly was invited to:

- a) take note of the creation of the AIG Regional Cooperation Mechanism (ARCM) of South America;
- b) urge the States and regional organisations worldwide to enter into agreements with the ARCM in order to strengthen global AIG cooperation; and
- c) support the ARCM in the attainment of its objectives aimed at improving effective implementation (EI) by its member States and reducing aircraft accident and incident rates in the Region.

3.20 Regarding this working paper, the ICAO A/39 took note of, and endorsed, the work being carried out by the AIG Regional Cooperation Mechanism (ARCM) of South America. Through the ICAO Assembly, the ARCM received international recognition and could receive funds for its strengthening. At present, the ARCM is studying the formulation of mitigation plans for reducing accident and incident rates related to runway excursions (RE). It is also strengthening its safety data collection and processing system (SDCPS), fed by the ADREP/ECCAIRS systems of member States, and is also helping States improve effective implementation in the AIG area and reduce accident and incident rates in the South American Region.

Strategy for the implementation of the SSP within the safety management framework (WP/109)

3.21 In this WP, the SAM Region presented an analysis of the status of implementation of the SSP, its challenges and the impact it would have on effective implementation (EI) results in the SAM Region, taking into account that ICAO set the date of 1 January 2018 to begin auditing the 91 PQs of the SSP. In this regard, the Assembly was invited to:

- a) analyse the arguments presented in the WP in order to assess the possibility of postponing the start-up of audits covering the 91 PQs of Annex 19.

3.22 In this regard, the date of 1 January 2018 that had been established for the start-up of audits related to the 91 PQs of the SSP was postponed until 1 January 2020.

Protection of safety information (WP/110)

3.23 In this WP, the SAM Region submitted to the Assembly an analysis of opportunities for improvement relating to the need to take a closer look at aspects of safety information protection. In this regard, the Assembly was invited to:

- a) review the arguments put forward in this working paper and request ICAO to consider incorporating the Region's suggestions into Amendment 1 to Annex 19.

3.24 Regarding this working paper, most recommendations submitted by the SAM Region were incorporated into Annex 19, thus contributing to the enhancement of said Annex.

3.25 On this issue, the Meeting took note of the fine work accomplished by the representative of Peru in the formulation of suggestions, and was commended by the participants.

Assessment of the GASP amendment (WP/111)

3.26 In this working paper, the SAM Region proposed a six (6)-year GASP review cycle, eliminating the existing rigidity and taking account of the specific maturity level of each State's SSP. In this regard, the SAM Region invited the Assembly to:

- a) analyse the relevance of maintaining a referential milestone of 60% effective implementation (EI) of SARPs;
- b) extend the GASP amendment deadline to at least 6 years, given that it takes time for States to be able to achieve the strategic objectives. During the interim three-year period, ICAO could ask for comments, in order to be able to make an appropriate amendment every 6 years; and
- c) promote this new vision in the corresponding fora.

3.27 Despite the proposal of the SAM Region for a six (6)-year GASP review cycle, eliminating the existing rigidity and taking account of the specific level of maturity of each State's SSP, the GASP would continue to be reviewed every three (3) years.

Compliance with the Declaration of Bogota (WP/113)

3.28 In this WP, the SAM Region presented the progress made by its States in the attainment of the safety and air navigation goals set in the Declaration of Bogota for 2016. In this regard, the Assembly was invited to:

- a) take note of the information provided and request ICAO to review the methodology for classifying accidents in the Regions.

3.29 In this regard, the Assembly took note of the progress made in South America in terms of safety and of the request for ICAO to review the methodology for classifying accidents in its Regions.

3.30 As to the revision of the methodology for classifying accidents, ICAO was still examining this issue. In this regard, the Meeting considered insisting on this topic, taking into account the impact it had on accident rate calculations in the SAM Region.

Recognition of multinational certifications (WP/115)

3.31 In this WP, the Assembly took note that the SRVSOP, as a regional safety oversight organisation (RSOO), shared the need to reduce duplication of activities concerning certification and oversight of approved maintenance organisations (AMOs) and approved training organisations (ATOs), so as to contribute to the global development of the aeronautical industry and strengthen safety through the application of standards consistent with the SARPs contained in the Annexes to the Chicago Convention for the conduction of these activities. In this regard, the Assembly was invited to:

- a) support ICAO in the implementation of actions for the establishment of a global framework for the certification and oversight of AMOs and ATOs, based on the regional harmonisation of regulatory requirements and procedures for conducting these activities;
- b) urge States and regional organisations at global level to sign agreements for mutual recognition of approved maintenance and training organisations in order to avoid duplication of efforts and contribute to the development of the global aviation industry; and
- c) urge States to set deadlines for the harmonisation of their regulations, based on the SARPs contained in the Annexes to the Convention, in order to allow for the standardisation and to facilitate multinational processes of certification and oversight of the aforementioned organisations.

3.32 Regarding the work being carried out by the SRVSOP on the recognition of multinational certifications, it was broadly endorsed by the participants at the 39th Assembly. In this regard, the Meeting took note that ICAO Headquarters was currently working on an amendment to its Annexes for the recognition of multinational certifications of AMOs.

3.33 In this regard, the United States FAA expressed interest in participating as an observer in multinational certifications or oversight inspections to be carried out by the SRVSOP on AMOs of South America, in order to understand the process conducted by the Regional System. In this sense, the Meeting agreed to allow the FAA to participate as an observer in certification or oversight activities within the multinational framework of the SRVSOP.

3.34 The Meeting deemed important that in order to be consistent with the decisions adopted, SAM States make follow-up to those ICAO activities supported in the A39, especially in preparing answers to ICAO queries on proposal for amendments or other actions. Likewise in view of the positive results obtained in the A39 from the joint work made in the presentation of proposal through working papers coordinated and endorsed by all States, States of the Region were urged to continue with this procedures in future ICAO global events (conferences, symposiums, Assembly etc.).

Google Loon project

3.35 The Meeting received updated information on Project Loon which is a heavy unmanned free balloon network that flies at high altitude, the purpose of which is to take the Internet to parts of the world currently not covered by the service. The Meeting also took note that Project Loon had been endorsed by the ICAO A39, and that the number of agreements between Google and ICAO member States to formalize the corresponding operational procedures for a safe and efficient operation had increased. In this regard, the Meeting recalled that ICAO, through letter AN13/22.1-16/42 of 17 June 2016, had informed about the operation of unmanned free balloons at high altitude, presenting an

explanatory sheet prepared and distributed by Google on the project, as well as sample standards and procedures applied by some member States in relation to unmanned free balloons. In this sense, the Meeting took note on the progress made by Brazil and Peru with respect to Loon.

Agenda Item 4: Follow-up to GREPECAS and RASG-PA activities

4.1 Under this agenda item, the Meeting reviewed WP/12 – *Follow-up to GREPECAS activities* and WP/13 *Follow-up to RASG PA activities*, both presented by the Secretariat.

Follow-up to GREPECAS activities

4.2 Upon analysing the status of execution of activities carried out in the SAM Region for the implementation of air navigation priorities in the AGA, AIM, ATM, CNS, and MET areas and in GREPECAS projects, the Meeting highlighted the difficulties encountered in the Region for such execution. The list of difficulties is shown in **Appendix A** to this agenda item.

4.3 In this regard, the Meeting felt that, although the SAM Region had made significant progress in the execution of activities under GREPECAS projects and air navigation priorities, the States should assign the highest priority to the resolution of such difficulties, and draft a national action plan containing measures to be applied and estimated dates for their resolution. This plan should be submitted to the ICAO South American Office by 22 December 2017.

4.4 In this regard, the Meeting formulated the following conclusion:

Conclusion AN&FS/4-3 – NATIONAL ACTION PLAN FOR RESOLUTION OF DIFFICULTIES IN THE IMPLEMENTATION OF AIR NAVIGATION SERVICES AND SYSTEMS IN THE SAM REGION

That, in order to solve the difficulties identified in the execution of activities under GREPECAS projects and regional air navigation priorities, as listed in Appendix A to this agenda item, States develop a national action plan containing the measures to be adopted and the estimated dates of implementation, and submit it to the ICAO South American Office by 22 December 2017.

Follow-up to RASG PA activities

4.5 Regarding the follow-up to RASG-PA activities, the Meeting took note of the approval of the RASG PA procedural handbook, 4th edition, the progress made in the 7th edition of the Annual Safety Report (ASR), and the two initiatives being coordinated with the SRVSOP and ICAO: the first one related to the extension of the weight threshold in the standard concerning the implementation of the flight data analysis programme (FDAP) for aircraft with a gross weight above 5,700 kg up to 27,000 kg inclusive; and the second one on the implementation of the ICAO safety information monitoring service (SIMS) in the SAM Region.

4.6 Regarding the implementation of SIMS in the SAM Region, it was noted that implementation of the system had started in Colombia, Bolivia and Peru, where they have started receiving data and displaying indicators on the platform. Implementation in Chile and Brazil would follow. Panama and Paraguay also showed interest in participating in this programme, to which end the Secretariat requested them to nominate a focal point in order to start the corresponding arrangements.

GREPECAS RASG PA coordination

4.7 Furthermore, regarding the RASG PA working groups, the Meeting expressed its concern with respect to missing the opportunity of working in the area of runway excursions and mid-air collisions (ATM safety) from a holistic and systematic point of view, since both RASG PA and GREPECAS projects work on the same topics from different perspectives. Accordingly, it was felt that the Secretariat should facilitate greater coordination between the focal points of both groups, in order to study the feasibility of applying coordination mechanisms for addressing issues from an integrated viewpoint that would contribute to an efficient management of activities of both GREPECAS and the RASG PA. This proposal would be submitted for discussion to the RASG PA Executive Committee and to the GREPECAS PPRC.

4.8 Note was also taken of the need to improve coordination between RASG PA activities and the work carried out by the RSOOs of both Regions in order to optimise resources.

Difficulties encountered in the implementation of GREPECAS project activities and air navigation priorities in ATM, AIM, CNS, AGA, and MET areas

ATM

PBN

- The lack of PANS-OPS designers is being reversed in the Region. However, States must do their utmost to continue training these specialists through basic courses, and schedule recurrent and specialized courses to maintain designer competencies.
- States that have not completed TMA redesign based on the PBN planning concept are urged to strengthen project implementation management and to allocate the resources and staff required for such purpose.
- States must calculate CO2 emission savings for all PBN implementations and deliver the information to the Secretariat.

ATFM

- Several States have not implemented their FMUs/FMPs in the respective ACCs.
- Several States have not made their runway and ATS capacity calculations. Other States have done it, but it requires updating at least once a year.
- A significant reduction in the number of NOTAMs with flow control restrictions issued in the Region has been noted since May 2017. States must endeavour to definitively eradicate these practices and strengthen the work of FMUs/FMPs for the use of coordinated ATFM measures between adjacent units, in accordance with Doc 9971, if temporary demand/capacity imbalances need to be mitigated.

AIM

- QMS/AIM implementation
 - Excessive delays in the implementation in Bolivia, Guyana and Suriname.
 - Delays in completing implementation in Colombia, Ecuador and Venezuela.
 - Lack of plans for adjusting to ISO 9001 version 2015 in Argentina and Uruguay.
- e- TOD implementation
 - Implementation plans with remote horizons.
 - Several States have not even submitted implementation plans.
 - High compliance cost.
 - Cost-benefit analyses should be carried out in the Region.
 - At present, it is a GANDD deficiency.
- AIXM
 - Some progress has been made, but more investment is needed.
 - It must be accompanied by AMHS interconnections.

- E-AIP
 - Brazil, Peru, Colombia, Panama and Venezuela showed significant progress.
 - States need to invest more in order to meet the deadlines.
- Digital NOTAM
 - The initial horizon must be modified to 2019.

CNS

AMHS interconnection

- Operational implementation of AMHS interconnections shown in Appendix B to the report on agenda item 1.
- Registration of external operators at the Eurocontrol ATS Messaging Management Centre (AMC) State Letter AN/7/49.1-09-34 dated 14 April 2009.

AIDC interconnection

- Operational implementation of AIDC interconnections shown in Appendix E to the report on agenda item 1.
- Implementation of radar data exchange specified in MoUs established in the SAM Region between Argentina – Chile, Argentina – Brazil, Uruguay – Brazil, Brazil – Venezuela and Brazil – Peru.

AGA (AERODROMES)

Aerodromes Certification

- Very low and out of proportion application of the requirement in most States (some 0%)
- States do not establish nor implement certification plans and subsequent aerodrome surveillance in a near future (Project F1 under review)
- Lack of specialties and staff required in States for implementation
- Plural number of aerodromes declared as international but not receiving international operations
- Approach of State's AGA resources in surveillance not complying with previous certification requirement
- Low application of exemptions mechanisms to close certification process gaps

Runway Safety

- States do not have a national strategy of runway safety teams implementation
- Old runways infrastructure with poor maintenance.
- GREPECAS - RASGPA efforts coordination

MET

- QMS/MET implementation
 - Inexplicable delays, given the support of the Secretariat and WMO for its implementation.
 - Lack of plans to adapt to ISO 9001 version 2015.
- Release of radioactive material
 - Coordinate procedures between the ANSP and the MET provider for cases of release of radioactive material.
- Implementation of other MET elements
 - State civil aviation authorities should ask the MET provider to implement these elements.

Agenda Item 5: Regional plan for the sustainability of air transport in the SAM Region

5.1 Under this agenda item, the Meeting took note on the information provided in WP/14 - *Progress and future actions related to the Regional Plan for the sustainability of air transport in the SAM Region*, and IP/04 - *Conceptualización de conectividad y desarrollo de una métrica global sobre conectividad aérea (Spanish only)* presented by the Secretariat.

5.2 In order to examine WP/14 and IP/04, the Meeting saw the need to create an *ad hoc* group consisting of Argentina, Brazil, Chile, Peru, and Venezuela, and designated Peru as its rapporteur.

5.3 Based on the work carried out by the *ad hoc* group, the Meeting considered that the AN&FS/4 meeting could not review the declaration of implementation of the Regional plan for the sustainability of air transport in the SAM Region, and proposed the establishment of a group of experts nominated by the States of the Region, who would be responsible for drafting said plan and the declaration of implementation, taking as a reference all the documentation prepared by the ICAO SAM Office for that purpose.

5.4 In this sense, the Meeting formulated the following draft conclusion to be submitted to the Fifteenth Meeting of Civil Aviation Authorities of the SAM Region (RAAC/15) to be held in Asunción, Paraguay, on 4-6 December 2017:

Draft Conclusion RAAC/15/XX – ACTION TO BE TAKEN FOR THE APPROVAL OF THE REGIONAL PLAN FOR THE SUSTAINABILITY OF AIR TRANSPORT IN THE SAM REGION AND THE DECLARATION OF IMPLEMENTATION

That, in order to have a regional plan for the sustainability of air transport in the SAM Region and a declaration of implementation, the Directors General of Civil Aviation of the SAM Region:

- a) initially recognise the importance of the four exes that could make up the Regional plan for the sustainability of air transport in the SAM Region: connectivity, safety, institutional building, and environmental protection, which are aligned with ICAO strategic objectives and with the sustainable development goals of the United Nations;
- b) undertake to nominate by 29 December 2017 the focal points and experts they deem necessary to make up the working groups that will be responsible for drafting the regional plan for the sustainability of air transport in the SAM Region and the declaration of implementation, based on the documentation prepared by the SAM Regional Office in this regard; and
- c) undertake to take action as needed to draft the aforementioned plan and its respective declaration by 29 June 2018.

Agenda Item 6: Other business

6.1 Under this agenda item, the Meeting took note about United States FAA mandate regarding ADS-B out implementation as of 01 January 2020 analysed in WP/16 - *Automatic Dependent Surveillance – Broadcast (ADS-B) out; ensuring preparedness for the 2020 equipage mandate*, presented by the United States.

6.2 In this regard, it was reported that the FAA has contacted air services operators flying to The United States of America to inform them on compliance of this disposition.

6.3 The Meeting agreed that each South American State inform of this FAA requirement to its operators that fly to the United States of America.

6.4 The Meeting was informed that, due to the earthquake of 19 September 2017 occurred in Mexico City, Mexico, and considering the security of the participants, the NAM/CAR/SAM Automatic Dependent Surveillance – Broadcast (ADS-B) Implementation Meeting was postponed and rescheduled to be held in Lima, from 13 to 16 November 2017.