RLA/06/901 – RCC/13

INTERNATIONAL CIVIL AVIATION ORGANIZATION
South American Office

Regional Project RLA/06/901

Assistance in the implementation of an ATM regional system according to the ATM operational concept and the corresponding technological CNS support

THIRTEENTH MEETING OF THE COORDINATION COMMITTEE

(RCC/13)

FINAL REPORT

(Lima, Peru, 27 and 28 June 2019)

INDEX

HISTORY OF THE MEETING

ii-1 PLACE AND DURATION

The Thirteenth Meeting of the Coordination Committee of the Regional Project RLA/06/901 was held in the premises of the ICAO South American Regional Office in Lima, Peru, from 27 to 28 June 2019.

ii-2 ORGANIZATION, OFFICERS AND SECRETARIAT

The Meeting was chaired and coordinated by Mrs. Verónica Chávez, ICAO TAO Regional Officer, and assisted by Mr. Jorge Armoa, AIM/MET Regional Officer and Mr. Fernando Hermoza, ATM/SAR Regional Officer. It was also supported by Messrs. Fabio Salvatierra, AGA Regional Officer and Francisco Almeida, CNS Regional Officer.

ii-3 WORKING LANGUAGE

The working languages of the Meeting were English and Spanish and documentation were prepared in both languages.

ii-4 AGENDA

The following agenda was adopted:

Agenda Item 1: Follow up on conclusions adopted by the Coordination Committee

Agenda Item 2: Report on the implementation of the programme of activities to date, since the last Coordination Meeting of the RLA/06/901 Regional Project

Agenda Item 3: Administrative and financial situation of the Project

Agenda Item 4: Work programme of activities for 2020

Agenda Item 5: Other matters

ii-5 ATTENDANCE

The Meeting was attended by 13 participants of the following project member States: Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Suriname, Uruguay and Venezuela, as well as officers of the ICAO South American Regional Office. The list of participants is shown in page iii-1.

ii-6 LIST OF CONCLUSIONS

LIST OF PARTICIPANTS

BOLIVIA

1. Walter Olivera

BRAZIL

2. Ary Rodrigues Bertolino
3. Marcelo Moraes de Oliveira

CHILE

4. Germán A. Olave

COLOMBIA

5. Rolando Aros Riaño

ECUADOR

6. Bolívar Dávalos

PARAGUAY

7. Roque Díaz Estigarribia

PERU

8. Paulo Vila

SURINAME

9. Faizel Baarn
10. Bianca Adigee

URUGUAY

11. Pablo Simone

VENEZUELA

12. Carlos Mata Sosa
13. Zirly Marín Gomez

ICAO

14. Verónica Chávez
15. Jorge Armoa
16. Fabio Salvatierra
17. Fernando Hermoza
18. Francisco Almeida

Agenda Item 1: Follow up on conclusions adopted by the Coordination Committee

1.1 The Meeting took note of the status of valid conclusions since the Twelfth Meeting held in Lima, Peru, from 23 to 24 August, 2018 and verified the progress of its compliance.

1.2 Regarding conclusion RCC/11-01 - *Approval of the program of activities for the year 2018,* and Conclusion RCC/12-01 – *Approval of the program of activities for the year 2018, – Revised,* it was reported that both are concluded and with respect to the Conclusion RCC/12-02 - *Approval of the program of activities for the year 2019,* it was reported that is still in progress.

1.3 The **Appendix** to this Agenda Item presents a table containing information on the status of implementation of the still remaining valid conclusions adopted by the Committee, to date.

APPENDIX

STATUS OF IMPLEMENTATION OF CONCLUSIONS ADOPTED BY THE COORDINATION COMMITTEE

Conclusions	Specific Tasks	Deliverables	Completion Date	Responsible Party	Status of Implementation
CONCLUSION RCC/11-01 - Approval of the programme of activities for 2018 That, the Secretariat amend the plan of activities in accordance with the instructions provided by the RLA/06/901 Regional Project Coordination Committee, for submission to the Project Focal Points by 15 November 2017, and further approval. **Appendix A** presents the outlined activities; **Appendix B**, the Gantt chart as complement; and **Appendix C**, the list of resources to be used at each activity.	Implement the approved work plan	Implementation of the 2018 plan of activities	1/12/2019	ICAO	Completed
CONCLUSION RCC/12-01 Approval of the 2018 programme of activities – Revised That, the RLA/06/901 Regional Project Coordination Committee approves the 2018 programme of activities – revised, in accordance with Appendices A and B to this Agenda Item.	Implement the approved work plan	Implementation of the 2018 plan of activities	1/12/2019	ICAO	Completed (See WP/03)

Conclusions	Specific Tasks	Deliverables	Completion Date	Responsible Party	Status of Implementation
CONCLUSION RCC/12-02 Approval of the 2019 programme of activities That, the RLA/06/901 Regional Project Coordination Committee approves the 2019 programme of activities, with a budget of **USD 466,526**.	Implement the approved work plan	Implementation of the 2019 plan of activities	1/12/2020	ICAO	In progress (See WP/03)

Agenda Item 2: Report on the implementation of the programme of activities to date, since the last Coordination Meeting of the RLA/06/901 Regional Project

2.1 Under this agenda item, the Meeting analyzed WP/03 where the activities executed during 2018 and 2019 were detailed, as well as the result of the evaluation of the Project.

2.2 It was noted that during the year 2018 a 95% implementation of the budget was achieved in terms of planned activities and 92% of the programmed activities were carried out. Additionally, USD 7,184 was implemented in assistance activities requested by the States and a payment of USD 150,400 was made corresponding to the RAIM service for 2017 and 2018.

2.3 Regarding the 2019 programme of activities, which has a budget of USD 466,526, as of May 15, 55% of the budget has been implemented, including staff costs and execution of 21% of programmed activities. In addition, the Meeting was informed about the results of the last activities carried out in June 2019, which are detailed in **Appendix A**.

2.4 On the activities described, it was informed that during the GREPECAS MET Project Meeting, Venezuela offered a software developed by them for the conversion of the XML/GML format to the IWXXM, which could be used by a State that does not yet have this solution.

2.5 In relation to the annual evaluation of the Project, the Meeting took note of the three parts of the evaluation: **Appendix B**, where the situation of the Project is presented as of May 15, 2019, together with the management indicators and results. **Appendix C**, with the monitoring and control of the Project on the approved work plan for the year 2018. **Appendix D**, result of the survey on the management indicators and results that the participating States completed, indicating their assessment, based on the scale included in this part, on the performance of the Project, the fulfillment of the objectives and the execution and provision of services by ICAO, culminating with an identification of lessons learned.

2.6 With regard to the survey on management indicators and results, this was completed by the States of Bolivia, Brazil, Colombia, Chile, Ecuador, Paraguay, Peru, Uruguay and Venezuela, whose comments and ratings show an average of four (4) points on a maximum of five (5) established in the rating scale, which indicates that this score supposes that "the objectives of the Project were reached in all cases", with respect to the activities carried out.

2.7 The need for the Project to start planning on the challenges that RPAS/UAS technology will bring, was highlighted. In Agenda Item 4 this theme was developed.

2.8 On the other hand, it was referred to strength in the ANS authorities, the understanding of the conceptual bases of the tasks and/or activities of the project, with the purpose of enabling the States to assume specific and achievable commitments over time. Strengthen collaboration programs among the States of the SAM region in topics such as A-CDM and obtaining KPI.

2.9 On the other hand, as opportunities for improvement, it was highlighted that the use of teleconferences should be a recurrent management tool today, to overcome instances and boost management in order to ensure the safety of regional air navigation; besides optimizing relations at the project level with the CAR Region, that could consider an increase in meetings with CAR Region. Likewise, it was stated that the States must sincere the real fulfillment of the activities and tasks of the project, and the main causes that affect the achievement of said objectives must be debated. It was also indicated that the Regional Office should pay more attention to the real needs of States Considering the above, it was reported that the way to identify the project support activities was through the regional

meetings, being the SAM / IG and its study and implementation groups (GESEA, GT Interop) one of the main sources. In this sense, the possibility of reconsider the organization of this meeting was raised to leave a space that allows the follow-up of each of the regional initiatives.

Renewal of the SATDIS service

2.10 The Meeting then took note of the activities carried out on the renewal of the SATDIS service, which was presented in WP/04. The process of renewal of the service is being carried out through an international bidding process, which is carried out by the Technical Cooperation Bureau. The Service would keep the annual cost of USD 87,373.00 per year, which means that the fee for the service per State of USD 7,943.00 will be maintained.

2.11 In this regard, the Secretariat informed that this process began in June 2019, and is now in the stage of receiving proposals. It is estimated to finish in August 2019, but these times depend on the time of review of the proposals and in the selection and hiring process.

APPENDIX A

PROGRAMME OF ACTIVITIES OF REGIONAL PROJECT RLA/06/901 FOR YEAR 2019

Result 1.1 Implementation of performance-based navigation (PBN)

Activity	Comments
Seminar on the organization of instrument flight procedure design services (IFPD)	It was carried out in Lima, from 8 to 12 Apirl with the participation of 15 specialists from 9 States, and 2 from IATA. This event analyzed the sustainability of the instrument flight procedure design services and its compliance with Annex 11 SARPs and Doc 10068 guidelines. The bases to start with the implementation of IFPD services quality assurance systems were established, achieving the understanding of Doc. 9906. An analysis was made regarding he Region's PANS OPS specialists needs to receive refresher courses and/or recurrent training courses.
Fourth workshop on PANS-OPS implementation	Lima, 21-25 October - Scheduled

Result 1.2 Assistance for the implementation of air traffic flow management (ATFM) at airports

Activities	Comments
Updating of the guidance document for the regional ATFM service	The activity has been re-scheduled to take place through two two-week missions each, two ATFM specialists of the Region have been convened carried out this activity from 19 to 29 August, and from 2 to 13 September 2019.

Result 1.6 Action plan for the implementation of improvements to aerodrome design and management

Activities	Comments
Fourth seminar/workshop on A-CDM	Scheduled.

Activities	Comments
Second Seminar/Workshop on airport planning	Re-scheduled for the second semester of 2019, together with the seminar on A-CDM, to obtain the participation of a higher number of specialists, given the relationship between both activities
Support in the drafting of guidance documentation within the ACDM and ADPLAN Project	Scheduled.

Result 1.7 Action plan for the implementation of functional improvements to the provision of aeronautical information services

Activities	Comments
SAM/AIM/12	Carried out in Lima from 3 to 7 June, with a participation of 39 delegates from 11 States and 10 fellowships were awarded.
Basic Course on GIS (Geographic Information System) for 22 persons	Scheduled.

Result 1.8 Action plan for functional improvements to the provision of meteorological services for international air navigation

Activities	Comments
Meeting on GREPECAS MET Projects for the SAM Region	Carried out in Lima from 17 to 20 June with a total participation of 38 specialists of CAR/SAM Region and 8 fellowships were awarded. A total of 51 initiatives were approved, which have a 4 stage planning for publishing and putting into service.

Result 1.10 Study of the SAM ATS route network optimization

Activities	Comments
Drafting of the SAM ATS Routes Network draft, Version 05	Carried out with the participation of two specialists from Venezuela and Peru. Version 05 of the SAM ATS Routes Network was prepared. It counted with the support of a specialist from COCESNA, to analyze the CAR Region airspace and its interface with the SAM Region. Of the 51 route optimization proposals formulated in Version 05, 32 pertain to the CAR/SAM route interface and 19, to the SAM Region.
ATSRO/10	It was carried out in Bogota from 17 to 21 June. A total of 41 specialists of the SAM – NAM/CAR Regions, 13 fellowships were awarded.
Drafting of a catalogue for the planning and follow-up to ATS routes implementation and regional flight procedures	A specialist from Peru drafted the regional routes catalogue, an ATM planning tool enabling route designator analyses (ICARD data base), and observing any duplication that might arise as product of RNAV-5 implementation actions, and regional and domestic ATS airspace optimization. Coordination's have started with ICAO HQ in order to standardize the designators, in accordance with the block of designators assigned to the Regional Offices.

Other activities

Activities	Comments
SAMIG/23 Air navigation implementation priorities considered in GREPECAS programs and Regional initiatives.	Carried out with the participation of 84 participants from 13 SAM States, 1 NAM/CAR State (Observer), 4 international organizations, and 4 industry representatives. The SAM Airspace Study and Implementation Group was established, in order to improve the work of the SAM/IG regarding PBN planning and implementation. Activities related with RNAV to RNP activities were approved, as per the action plan requested by ICAO. Actions to include air traffic flow management (ATFM) elements within ATS contingency responses were approved, in view of the systems and ample knowledge available in the States of the Region. In addition, the meeting studied the proposal to update the CAR/SAM ATFM CONOPS, receiving valuable contributions. Improvements to impulse horizontal cooperation activities with RLA/06/901 were proposed. Coordination ensuring total AMHS interconnection in the SAM Region in 2019 have been completed.

	Installation, through REDDIG, of the ATS speech circuit between Corumba and Puerto Suarez airports has been completed.
SAMIG/24 Air navigation implementation priorities considered in GREPECAS programs and Regional initiatives.	Scheduled.
Workshop on the Identification and implementation of performance indicators of air navigation systems in SAM Region	Scheduled.

SITUATION OF THE PROJECT AS OF 15 MAY 2019
AND MANAGEMENT AND RESULT INDICATORS

IMMEDIATE OBJECTIVE Nº 1	**Development and implementation of global air navigation plan initiatives that will lead to the transition from an air traffic management system based on ground systems to another one based on aircraft performance.**
RESULT 1.1	**Implementation of performance-based navigation (PBN)**
CURRENT STATUS	**Progress percentage 50%**
PLANNED SCHEDULE	**Start up date: 08 Apr 19 Delivery date: 25 oct 19**
ACTUAL SCHEDULE	**Start up date: 08 Apr 19 Delivery date: 25 oct 19 Deviation:X Cause:X**

RESULT 1.1	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
1.1.1.Obtain and complete the information, learning about the current status in the participating States and organisations with respect to: a) Available CNS infrastructure, with the corresponding coverage and plans for future facilities; b) Characteristics of available ATM automated systems and future automation plans; c) Aircraft fleet operating in the CAR/SAM ATS route network and its RNAV and RNP capabilities, including capacity for arrival procedures based on the flight management system (FMS) and future plans of the users; d) Airworthiness and operational approval capabilities; e) Airports that might derive operational benefits from the use of RNAV and/or RNP; f) Status of implementation of WGS 84; g) Existing SIDs and STARs connecting international airports to ATS routes; h) Real-time and accelerated simulation of operations; i) Cost-benefit analysis of facilities; j) Safety assessment models; k) Regulation of GNSS use (secondary, primary means) l) Documentation concerning the training of air traffic controllers; m) Terminal control area design and control.		
1.1.2Analyse the application of GNSS to support all flight stages, including: a)The required ground navigation infrastructure for the operations contemplated in current plans, based on the development of system technology; b)En-route operations without using precision values with RNAV-5 (continental airspaces) and with RNP-4 (oceanic airspaces); c)TMA operations (RNAV 1) and approaches (RNP 0,3 and RNP AR), with ABAS; d)Operational benefits of using GBAS		
1.1.3.Develop a model action plan based on the information processed in 1.1.1 and 1.1.2, to be used in the implementation of PBN for enroute operations, according to the following regional planning: I. Short term (until 2010) RNP 10 oceanic airspace and RNAV 5 continental airspace. II. Medium term (2011 to 2015) RNP 4 oceanic airspace and RNP 2 selected continental airspaces.		
1.1.4 Determine and develop the necessary material for PBN implementation for en-route operations, in coordination with the participating States and organisations, taking into account environmental protection methods and procedures, and including the following aspects: a)PBN operational concept; b)Cost-benefit analysis; c)Aircraft and operator approval requirements and processes; d)Modification of national norms and airspace regulations; e)RNAV and RNP document formats to be included in the CAR/SAM web; f)Required AICs/NOTAMs and AIP supplements; g)Amendment to Doc 7030 as required; h)Amendments to the corresponding letters of agreement; i)Procedures for pilots and ATC;		

j)Procedures to accommodate non-RNAV and non-RNP aircraft where applicable; k)Transition procedures, if necessary; l)ATC training; m) Airspace safety assessment;		
1.1.5 Develop guidelines based on the information processed under 1.1.1 and 1.1.2, to be used by the participating States and organisations in the implementation of PBN in TMA and approach, including the following main tasks: a)Terminal area operations, including standard instrument departures and arrivals (RNAV 1 in radar environments with the proper navigation infrastructure and RNP 1 in non-radar environments without the proper DME coverage infrastructure); and b)Instrument flight rule approaches (RNP 0.3 in as many aerodromes as possible and in all international airports, and RNP AR in airports deriving operational benefits). II. Medium term (2011 to 2015) a)Terminal area operations, including standard instrument departures and standard instrument arrivals (extended application of RNAV1/RNP1 and mandatory use of RNAV1/RNP1—exclusionary airspace—in TMAs with greater air traffic density); and b)Instrument flight rule approaches (extended application of RNP 0.3 in as many aerodromes as possible and in all international airports, RNP AR in airports deriving operational benefits, and start-up of the application of GLS procedures).		
1.1.6Develop guidelines based on the information processed under 1.1.1, 1.1.2, and 1.1.3, to be used by the participating States and organisations in the implementation of PBN in TMA and approach, including the following main tasks: a)Cost-benefit analysis; b)Safety assessment; c)Design of procedures; d)Real-time and accelerated simulation of operations; e)ATC automated systems; f)Training of air traffic controllers; g)Aircraft and operator approval; h)Terminal control area design and management; i)Model regulations for GNSS application (primary, secondary means, operational restrictions, etc.).		
1.1.7 Provide assistance to the participating States and organisations for the implementation of the PBN implementation action plan, including the programming of the necessary coordination and training activities.	3.1.1 Seminar on the organization of instrument flight procedure design services (IFPD) (Lima, 8 12 April); and 3.1.4 Fourth workshop on PANS-OPS implementation (Lima, 21-25 October)	3.1.1. Completed. 7 fellowships; and 3.1.2. To be held.
1.1.8 Adquirir e implementar el servicio de predicción de la disponibilidad RAIM en la Región Sudamericana, incluyendo: a) Determinación de las especificaciones técnicas finales en base a las especificaciones acordadas por los Estados participantes; b) Preparación del llamado a licitación internacional para la implantación del servicio; c) Definición del criterio para la evaluación de las ofertas; d) Convocatoria a la licitación de conformidad con los procedimientos de la OACI aplicables; e) Absolución de consultas de los postores; f) Selección de la mejor oferta; g) Negociación y adjudicación del contrato con el postor seleccionado; h) Ejecución del contrato y su supervisión.		
1.1.9 Coordinar con los Estados la participación de sus representantes en la evaluación de las ofertas y en las pruebas de aceptación del servicio, asumiendo los costos involucrados con fondos que no sean del proyecto.		
1.1.10 Verificar el funcionamiento satisfactorio del servicio en el período de prueba y, de resultar conforme, suscribir las actas de aceptación final.		
1.1.11 Mantener el servicio de predicción de la disponibilidad RAIM las 24 horas al día, 7 días a la semana (24/7) en apoyo de los procedimientos PBN en ruta, área terminal y aproximación.		
1.1.12 Preparar un informe final sobre lo actuado, incluyendo las recomendaciones pertinentes.	Report of SAM/IG/23 meeting (Lima, 6-10 May); and Report of SAM/IG/24 meeting (Lima, 11-15 November)	Completed

RESULT 1.2	**Assistance for the implementation of strategic air traffic flow management (ATFM) at airports**	
CURRENT STATUS	**Progress percentage 25%**	
PLANNED SCHEDULE	**Start up date: 11 mar 19 Delivery date: 05 abr 18**	
ACTUAL SCHEDULE	**Start up date: 11/03/19 Delivery date: 05/04/19 Deviation: X Cause: X**	
RESULT 1.2	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
1.2.1 Obtain and complete the information, learning about the current status in the participating States and organisations with respect to: a)The methods for estimating airport and ATC capacity; b) ATFM procedures for the following phase: • Airport strategic, • Airport tactical, • Airspace strategic, • Airspace tactical.		
1.2.2 Obtain and complete the information, learning about the current status in the participating States and organisations of the electronic databases required for the ATFM evolutionary phases, in relation to the following aspects: a)Flow management data processing and display: • Flight planning and flight plan processing data (FPL, RPL, etc.); • Airspace and airport structure data; • Display of the situation in the air; • Automatic messages to support decision-making (access to SLOTS, reporting of delays, alternate routes, etc.); • Monitoring of the operational status of air navigation infrastructure; • Capacity of the airport acceptance regime (AAR); • ATC capacity; • Air traffic demand; • Airspace structure and ATS route network; • Radio navigation aids, radar, etc.; • Aircraft performance. b)Surveillance system data (SSR, ADS, etc.; c)AIS/MAP (mapping, ATFM advisories, AIRAC updates, etc.); d)Meteorological information (MET); e)Data for historical and statistical analysis of air operations, meteorology, etc.; f)Communication systems in support of collaborative decision-making (CDM) with: • Other centralised ATFM systems; • Other FMUs and/or FMPs and/or ATS units; • Operators and users (airlines, general aviation, State aircraft, etc.); • Airport authorities; • Meteorological authorities; • Aeronautical information services. g)The necessary communication requirements to effectively support centralised air traffic flow management in its linkage with: • Other centralised ATFM systems; • FMUs, FMPs and/or ATS units involved; • Operators and users; • Airport authorities; • Meteorological authorities; • Aeronautical information services; • The transmission of ADS and radar data to the FMU and/or FMPs.		
1.2.3 Develop model action plans based on the information processed under 1.2.1 and 1.2.2, to be used by the participating States and organisations for the implementation of airport strategic ATFM.		
1.2.4 Develop guidelines, based on the information processed in the preceding activities, to be used by the participating States and organisations for the implementation of flow management units (FMUs) or flow management positions (FMPs) and for the incorporation of new procedures applicable to FMUs or FMPs concerning: a)Airport strategic ATFM; b)Airport tactical ATFM;		

c)Airspace strategic ATFM; and d)Airspace tactical ATFM.		
1.2.5 Identify and develop the necessary material for the implementation of the airport strategic ATFM, in coordination with the participating States and organisations, taking into account environmental protection practices and procedures, and including the following aspects: a)Cost-benefit analysis; b)Definition of data collection plans; c)Determination of the required automated systems, including performance parameters and the necessary tests and assessments; d)Updating of the SAM ATFM operational concept, if necessary; e)Drafting of a handbook on common operational procedures for air traffic flow management, including, inter alia, the following aspects: • Procedures applicable to the strategic, pre-tactical, and tactical phases; • Procedures for coordination and teleconferencing with FMUs/FMPs, ATS units, users, airports, and other organisations involved; • Collaborative decision-making procedures; • Methodology to determine airport and ATS capacity; • Procedure to keep ATFM databases permanently updated; • Procedures for pilots and ATC; • Required ATFM messages. f)Models of the required AICs/NOTAMs and AIP supplements; g)ATFM document formats to be included in the SAM web; h)Amendment to Doc 7030, if necessary; i)Amendments to the corresponding letters of agreement; j)ATC simulations; k)Harmonisation of applicable ANP requirements; l)ATFM training; m) Contingency plans.		
1.2.6 Provide assistance to the participating States and organisations for the execution of the ATFM implementation action plan, including the programming of the necessary coordination and training activities.	3.2.1 Updating of guidance material for the regional ATFM service	In progress
1.2.7 Draft a final report of the activities carried out, including relevant recommendations.		
RESULT 1.3	**Implementation of communication and surveillance (CNS) capacity improvements for en-route and terminal area operations**	
CURRENT STATUS	**Progress percentage 0%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 1.3	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
1.3.1 Obtain and complete the information, learning about the current status in the participating States and organisations with respect to: a)Existing CNS facilities and equipment; b)Regional planning and documentation on existing CNS; c)Aeronautical message handling systems (AMHS); d)Very high frequency data link (VDL) and high-frequency data link (HFDL); e)ATS interfacility data communication (AIDC); f)Automatic dependent surveillance by contract (ADS/C); g)Automatic dependent surveillance by broadcast (ADS/B); h)Multilateration, etc.; i)Communication protocols used.		
1.3.2 Analyse the operational scenarios of existing and planned ATS, in order to determine the operational requirements for improving communication and surveillance systems in the short and medium term, as well as other operational requirements to meet future ATM expectations, using, inter alia, the following tools: a)Aeronautical message handling system (AMHS), b)Very high frequency digital link (VDL), c)ATS interfacility data communication (AIDC), d)Automatic dependent surveillance by contract (ADS/C), e)Automatic dependent surveillance by broadcast (ADS/B), f)Multilateration, etc.		

1.3.3 Develop a strategy for the implementation of communication, navigation, and surveillance improvements in the SAM Region, taking into account the information obtained in the preceding activities.		
1.3.4 Develop a model action plan, based on the information processed in the preceding activities, to be used by the participating States and organisations in the implementation of improvements to CNS capabilities for en-route and terminal area operations, including the inputs and the programming of the necessary coordination and training activities.		
1.3.5 Follow up on the implementation of CNS facilities and capacity improvements for en-route and terminal area operations in the SAM Region, including the programming of the necessary coordination and training activities.		
1.3.6 Draft a final report on all the activities carried out, including the relevant recommendations.		
RESULT 1.4	**Assistance in the implementation of ATS message handling systems (AMHS) and their interconnection**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 1.4	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
1.4.1 Obtain and complete information, taking into consideration the current situation in the States and the situation of the ICAO SARPs, with respect to: a) Review of the regional AMHS (CAAs) routing plan; b) IP addressing used in the Region for implemented aeronautical applications; c) Review of the general technical AMHS specifications drafterd throughRLA/03/901 project; d) Review of the regional communications infrastructure to support the AMSH application; e) Operational requirements for AMHS application.		
1.4.2 AMHS interconnection in the SAM Region: a) Drafting of the SAM AMHS routing list; b) Drafting of an IP (Ipv4) addressing plan; c) Drafting and implementation of AMHS communications protocol trials between AMHS and MTAs, and between MTAs and UAs; d) Study on band width requirements necessary, both domestically and regionally, for the AMHS circuits; e) AMHS IP safety analysis; f) Study for the improvement of national and regional networks for the AMHS application; g) Study of new services to be transmitted through the AMHS application (ATS, MET, AIS, etc.).		
1.4.3 Establishment of a regional entity to manage offline AMHS addressing, considering the following activities: a) Analyse the current operation of the off-line management centre for AMHS addressing at Eurocontrol (AMC); b) Analyse the current interaction of the AMC with other ICAO Regions, in particular the SAM Region; c) Study the requirements necessary to implement a regional AMC centre, the requirements necessary for the integration of the AMC into Eurocontrol, and others that may arise.		
1.4.4 Drafting of regional guidance for the implementation of AMHS and their interconnection.		
RESULT 1.5	**Assistance for the implementation in the Region of surveillance systems, multilateration and ADS**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date : X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 1.5	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
1.5.1 Obtain and complete information on multilateration and ADS, with regard to: a) Study of multilateration and ADS systems (ADS C and ADS B) installed in the SAM Region and other ICAO regions; b) Status of ICAO SARPs on new surveillance systems (multilateration, ADS, etc.)		

1.5.2 In accordance with the unified strategy for the implementation of surveillance systems developed by GREPECAS, prepare a regional guidance document for the implementation of multilateration and the ADS, that contains: a) A study of operational surveillance requirements that could be covered through multilateration and ADS; b) A trial protocol for ADS B; c) Information on the current and planned capacity of the aircraft fleet in the Region that can support the ADS application (ADS C, ADS B); d) Support for the holding of ADS B trials; e) An analysis of the communications requirements to support multilateration and ADS B applications.		
RESULT 1.6	**Implementation of improvements to aerodrome design and management**	
CURRENT STATUS	**Progress percentage 0%**	
PLANNED SCHEDULE	**Start up date: 17 set 19 Delivery date 15 nov 19**	
ACTUAL SCHEDULE	**Start up date: 17 set Delivery date: 15 nov Deviation: X Cause: X**	
RESULT 1.6	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
1.6.1 Obtain and complete the information, learning about the current status of international aerodromes in the participating States, including: a) Available runways and their characteristics b) Design and utilisation of the movement area; c) Number, location, and utilisation modality of aircraft parking positions; d) Available handling services; e) Aircraft arrival and departure procedures; f) Flight scheduling; g) Number of operations during peak hours.		
1.6.2 Develop a model action plan to be used by the participating States and organisations for the implementation of improvements to the design and management of international aerodromes, with a view to: a)Using aerodrome resources and ground handling services more efficiently; b)Reducing delays; c)Achieving greater predictability in flight programming; d)Increasing capacity by improving aircraft arrival, parking, and departure procedures; e)Improving coordination among all parties, in order to make efficient use of parking areas; f) Optimising collaborative decision-making processes among ATM service providers, vehicle operators and aircraft operators; g)Optimising the use of the movement area by introducing the necessary structural improvements, such as: • Additional taxiways; • Runways that run parallel to the main runways for two-way traffic; • Additional runway exits, including high-speed or fast-exit taxiways; • Improved lighting and signs, etc. h)Sharing key data on flight programming among all stakeholders; i) Optimising surface traffic through improved organisation of ground vehicle movement in the manoeuvring area; j)Reducing runway occupation time, taking into account: • Airspace user performance; • ATS provider performance; • Surface area design; • Aircraft performance capabilities; • Surveillance capabilities; • Aircraft spacing; • Meteorological limitations; • Application of improved procedures to minimise spacing. k)Increasing safety and environmental protection.		

1.6.3 Develop guidelines based on the information processed under 1.6.1 and 1.6.2, to be used by the participating States and organisations for the implementation of international aerodrome design and management improvements that imply increasing capacity and reducing holding times.		
1.6.4 Provide assistance to the participating States and organisations for the implementation of the model action plan, including the programming of the necessary coordination and training activities.	3.5.1Fourth seminar/workshop on A-CDM (Lima, 29-31 October), 3.5.2Second seminar/workshop on airport planning (Lima, 17-20 September); and 3.5.3 Support in the drafting of guidance documentation within the ACDM and ADPLAN Project (Lima, 4-15 November)	To be carried out.
1.6.5 Draft a final report on the activities carried out, including the relevant recommendations.		
RESULT 1.7	**Implementation of functional improvements to the provision of aeronautical information services**	
CURRENT STATUS	**Progress percentage 0%**	
PLANNED SCHEDULE	**Start up date: 03 june 19 Delivery date: set 19**	
ACTUAL SCHEDULE	**Start up date: 03 june 19 Delivery date: set 19 Deviation: X Cause: X**	
RESULT 1.7	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
1.7.1 Obtain and complete the information, learning about the current status in the participating States and organisations with respect to aeronautical information services, including: a) Quality management systems; b)ATM, RNAV, and RNP requirements; c)Computer-based navigation system requirements; d)Availability of aeronautical information data banks; e)Availability of an automated AIP; f)Availability of electronic information; g)AIS automation plans; h)Implementation of the WGS-84 geodetic reference system; i) NOTAM contingency plan availability (national/international).		
1.7.2 Develop a model action plan, to be used by the participating States and organisations in the implementation of AIS improvements that will: a)provide quality-assured and real-time aeronautical information on terrain and obstacles; b)ensure the timely distribution of information; c)facilitate coordination among the various members of the ATM community; d)improve efficiency and safety; e)ensure that all members of the ATM community have the same information when making collaborative decisions; f)improve situational awareness of pilots during en-route, terminal area, and aerodrome operations; g)enable the completion of the implementation of the WGS-84 geodetic reference system; h)increase safety.		
1.7.3 Develop guidelines based on the information processed in 1.7.1 and 1.7.2, to be used by the participating States and organisations in the implementation of functional improvements to the provision of aeronautical information services		
1.7.4 Provide assistance to the participating States and organisations for the implementation of the model action plan, including the programming of the necessary coordination and training activities.	3.6.1 Basic Course on GIS (Lima, September); and 3.6.2 SAM/AIM/12 (Lima, 3-7 June)	To be carried out.
1.7.5 Prepare a final report on the activities carried out, including the relevant recommendations.		
RESULT 1.8	**Implementation of functional improvements to the provision of meteorological services for international air navigation**	
CURRENT STATUS	**Progress percentage 0%**	

PLANNED SCHEDULE	**Start up date: 17 june 19 Delivery date: 20 june 19**	
ACTUAL SCHEDULE	**Start up date: 17 june 19 Delivery date: 20 june 19 Deviation: X Cause: X**	
RESULT 1.8	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
1.8.1 Obtain and complete the information, learning about the current status in the participating States and organisations with respect to the meteorological services for international air navigation, including: a)ATM requirements; b)World area forecast system (WAFS) requirements; c)The international airways volcano watch; d)Tropical cyclone advisory system requirements; e)Use of data link for the transmission of meteorological information; f)Availability of meteorological information data banks; g)Automation of meteorological systems; h)Availability of electronic information; i)Plans for the automation of aeronautical meteorological services.		
1.8.2 Develop a model action plan to be used by the participating States and organisations for the implementation of improvements to the provision of MET services that will: a)Improve the availability of meteorological information in support of a seamless global ATM system; b)Improve the precision, timely distribution, and usefulness of the information produced by world area forecast, international airways volcano watch, and tropical cyclone advisory systems; c)Permit immediate access to real-time global meteorological information; d)Achieve the automation of meteorological systems; e)Assist ATM in the adoption of tactical decisions for aircraft surveillance, air traffic flow management, and flexible and dynamic aircraft routing; f)Increase safety.		
1.8.3 Develop guidelines, based on the information processed in 1.8.1 and 1.8.2, to be used by the participating States and organisations in the implementation of functional improvements to the provision of meteorological services to international air navigation.		
1.8.4 Provide assistance to the participating States and organisations for the implementation of the model action plan, including the programming of the necessary coordination and training activities.	3.5.1Workshop/Meeting on GREPECAS MET Projects for the SAM Region (Lima, 17 20 June)	To be carried out.
1.8.5 Draft a final report on the activities carried out, including the relevant recommendations.		
RESULT 1.9	**Training of at least XX officials from the CAAs in each topic related to the preceding results**	
CURRENT STATUS	**Progress percentage 0%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 1.9	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
1.9.1 Develop annual plans for the conduction of courses, seminars, workshops, and other activities that might be required concerning: a) Airspace planning; b) Construction of air navigation procedures; c) Airworthiness and operation approval; d) Safety assessment; e) Airspace monitoring; f) Performance-based navigation; g) Planning of air traffic flow management; h) National air navigation planning, incorporating the global ATM operational concept; i) New trends in communication systems; j) New trends in navigation systems; k) New trends in surveillance systems; l) New trends in flight test systems; m) Current and future use of the radio electric spectrum for aeronautical applications;	2019 work plan approved by RCC/12, including the holding of courses, seminars and workshops.	En progreso

n) Integration of automated systems; o) Other topics that may be required.		
1.9.2 Determine input requirements for organising and conducting each training activity.	Input necessary determined for the 2019 plan	In progress
1.9.3 Determine the costs of the inputs required for each activity, and the budget available for its execution.	Costs of input required, determined for the 2019 plan	Completed
1.9.4 Draft a working paper to submit the annual training plans and their logistic and financial requirements to the consideration and approval of the Project Coordination Committee.	Working papers for the 2019 plan, prepared	Completed
1.9.5 Examine and approve the annual training plans and their requirements.	2019 annual training plan approved by RCC/12	In progress
1.9.6 Prepare the information, the teaching material, and the presentations for each approved	Material for each event, prepared	In progress
1.9.7 Advise the participating States and organisations about the details of the training activities and the arrangements for their implementation.	Convening to each event submitted to participating States	In progress
1.9.8 Nominate the candidates for training activities, and introduce them to the respective ICAO Regional Office.	Candiates nominated by States received by the ICAO SAM RO.	In progress
1.9.9 Consider the requests for fellowships, and assign them according to the established budgetary provisions.	Fellowship requests processed, and notices of awards submitted by the ICAO SAM RO.	In progress
1.9.10 Carry out training activities and assess their results.	2019 work plan approved by RCC/12	In progress
1.9.11 Draft a report on the conduction of each activity and its results.	Reports prepared	In progress
RESULT 1.10	**Study of the optimisation of the ATS routes network**	
CURRENT STATUS	**Progress percentage 50%**	
PLANNED SCHEDULE	**Start up date: 15 apr 19 Delivery date: 21 jun 19**	
ACTUAL SCHEDULE	**Start up date: 15 apr 19 Delivery date: 21 jun 19 Deviation: X Cause: X**	
RESULT 1.10	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
1.10.1 Prepare a diagnosis on the current situation of the ATS route network in the SAM Region.		
1.10.2 Develop a plan for the drafting of a study that includes, among other things: a) List of products; b) Supporting tools for the conduct of the task; c) Compilation of data and methodology.	3.7.2 Drafting of a catalogue for the planning and follow-up to ATS routes implementation and regional flight procedures (Lima, 15 April to 3 May)	Completed; mission was carried out by an expert from Venezuela
1.10.3 Draft a study in conformity with the plan developed.	3.7.1 Tenth Workshop/Meeting of the ATS Routes Network Optimisation (ATSRO/10) (Bogota, 17-21 June)	To be carried out.
RESULT 1.11	**Proposed Regional Implementation Plan for Performance-based Air Navigation for the SAM Region (SAM ANIP)**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: 0 Cause: X**	
RESULT 1.11	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
1.11.1 Review existing documentation in the SAM Region, and globally, on the implementation of performance-based air navigation facilities and services.		
1.11.2 Develop a Performance-based Regional Air Navigation Implementation Plan for the SAM Region in accordance with the Global Air Navigation Plan and the Global ATM Operational Concept, that allows States to develop their national plans in harmony with the resulting regional plan, including: a) regional performance objectives; b) Generl implementation principles; c) the implementation strategy for each of the air navigation areas, such as ATM, CNS, AIM, MET, AGA/AOP and SAR; d) The expected evolution in each of the air navigation areas; e) Performance Framework forms (PFF) to be completed for all air navigation areas; f) The corresponding metrics that allow to measure the implementation achievement of the performance objectives.		

1.11.3 Develop an action plan for the implementation of SAM/ANIP, the drafting of additional regional documentation and guidance material for implementation by SAM States.		
RESULT 1.12	**Adoption of the appropriate multinational arrangements for the establishment and start-up of a regional organisation in charge of the implementation, management, and operation of multinational air navigation facilities.**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 1.12	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
1.12.1 Learn about the incorporation instruments approved by the States for the establishment of a regional organisation charged with the implementation, management, and operation of multinational air navigation facilities.		
1.12.2 Draft and propose an ICAO regional technical cooperation project document, based on the incorporation instruments of the new organisation, that will permit the establishment and initial operation of the latter.		
1.12.3 Draft a working paper supporting the submittal of the project document for its consideration and approval.		
1.12.4 Submit the working paper presenting the proposed project document to the consideration of the civil aviation authorities, requesting their comments.		
1.12.5 Make the necessary adjustments or changes to the project document, based on the comments generated.		
1.12.6 Submit the final project document proposal to the approval of the corresponding bodies of each State.		
1.12.7 Make arrangements for the implementation of the project as soon as it has been approved by the States concerned.		
IMMEDIATE OBJECTIVE Nº 2	**Implementation of AIS and MET quality assurance and safety management systems in SAM States, in keeping with international standards and recommended practices.**	
RESULT 2.1	**Implementation of AIS quality assurance systems in no less than 10 States, in keeping with the corresponding provisions contained in Annexes 6,11,14 and 15.**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 2.1	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
2.1.1 Obtain and complete the information, learning about the current status with respect to: a) SAM participating States plans for AIS automation implementation; b) Number of participating SAM States/organisations that count with, or are in the process of, implementing quality management systems (QMS) in AIS and in WGS-84; c) Problems encountered that are difficulting the implementation process, and measures necessary to allow it to continue.		
2.1.2 Plan and develop a seminar/workshop for the identification and implementation of specific procedures for AIS/MAP activities within the framework of quality management. The workshop should produce a checklist, with questions related to each procedure of the AIS activity harmonized to ISO 9001-2008, where a value criterion is defined to validate the processes and where the results can be measurable.		
2.1.3 On the results of the seminar/workshop, prepare a model action plan, based on the information obtained and on the available regional guidance material, to be used by the participating States for the implementation of a quality assurance system, including: a) Documented procedures; b) Inspection and testing methods; c) Equipment supervision and operations; d) Internal and external audits; e) Monitoring of corrective measures adopted; and		

f) Use of apropirate statistical analyses, when necessary.		
2.1.4 Assist the participating States and organisations in the implementation of the model action plan, including the programming of the necessary coordination and training activities		
2.1.5 Draft a final report on the activities carried out, including the relevant recommendations.		
RESULT 2.2	**Assistance for the implementation of quality assurance systems in Aeronautical Meteorology (QMS MET) including documented procedures required by ISO 9001:2008 in accordance with the provisions of Annex 3, in not less than 10 States**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 2.2	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
2.2.1 Obtain and complete information, taking into consideration the current situation in the participating States, with regard to: a) Plans of the participating States of the SAM Region on improvements to MET systems and implementation of automation in MET systems; b) Number of participating States/organisations in the SAM Region that have or are in the process of, implementing Quality Systems Management (QMS) in MET work processes; c) Problems encountered that hinder the implementation process, and necessary measures to allow it to continue.		
2.2.2 Develop the following documentation system: a) Quality and safety policies; b) Quality and safety management manual; c) Documented procedures required by ISO 9001: 2008, within the framework of the operational safety system: - Control of documents; - Control of records; - Internal audits; - Control of non-compliant products; - Risk assessment; - Corrective actions; - Preventive actions; d) Working procedures or instructions for an effective operation in aeronautical meteorology and risk assessment: - Working instructions for the aerodrome weather station; - Working instructions for the aerodrome meteorological office; - Working instructions for the meteorological watch office; - Working instructions for aeronautical climatology; - Working instructions for the World Area Forecast Centre (WAFC) of Washington; - Working instructions for the international data bank OPMET of Brasilia; - Working instructions for the Volcanic Ash Warnings Centre (VAAC) in Buenos Aires; - Working instructions for the Tropical Cyclone Warnings Centre (CAC) of Miami.		
2.2.3 Plan and develop a seminar/workshop for the identification and application of specific procedures for meteorological activities within the framework of quality management. The workshop should produce a checklist, with questions related to each MET activity procedure harmonised to ISO 9001-2008, where a value criterion is defined to validate the processes and where results can be measured.		
2.2.4 On the results from the seminar/workshop, prepare a model action plan, based on the information obtained and on the available regional guidance material, to be used by the participating States for the implementation of a quality assurance system, including: a) Documented procedures; b) Methods of inspection and testing; c) Monitoring of equipment and operations; d) Internal and external audits; e) Monitoring of corrective actions taken; and f) Use of appropriate statistical analysis, where necessary.		
2.2.5 Assist the participating States and organisations in the implementation of the model action plan, including the programming of the necessary coordination and training activities.		

2.2.6 Draft a final report on the activities carried out, including the relevant recommendations.		
RESULT 2.3	**Implementation of a State safety programme in no less than 10 States**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 2.3	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
2.3.1 Obtain and complete the information, learning about the current status of safety management and the establishment of a safety programme in the participating States.		
2.3.2 Develop a model action plan, based on the information obtained and the guidelines of the Safety Management Manual (Doc 9859), to be used by the States in the implementation of a State safety programme.		
2.3.3 Assist the participating States and organisations in the implementation of the model action plan, including the programming of the necessary coordination and training activities.		
2.3.4 Draft a final report on the activities carried out, including the relevant recommendations		
RESULT 2.4	**Implementation of a safety management system by the corresponding bodies in no less than 10 States**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 2.4	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
2.4.1 Obtain and complete the information, learning about the current status with respect to the adoption of a safety programme by the corresponding bodies in the participating States.		
2.4.2 Develop a model action plan, based on the information obtained and the guidelines of the safety management manual (Doc 9859), to be used by the participating States and organisations for the implementation of the safety management system that should be put in place by each certified aircraft operator, maintenance organisation, ATS provider, and aerodrome operator, and that will: a) Identify safety hazards; b) Make sure that the necessary corrective action is taken to mitigate risks and hazards; c) Contemplate the permanent supervision and periodic assessment of the level of safety achieved; d) Clearly define safety responsibilities; and e) Include the direct responsibility that top management has regarding safety.		
2.4.3 Develop guidelines to be used by the participating States for the establishment of a national acceptable level of safety, taking into account: a) safety efficiency indicators; b) safety efficiency objectives; and safety requirements.		
2.4.4 Develop guidelines to be used by the States for the adoption of a systemic approach to gradually and consistently address the various elements necessary to build an effective safety management system, comprising the following steps: a) Planning; b) Commitment of top management with respect to safety; c) Organisation; d) Identification of hazards; e) Risk management; f) Investigation capacity; g) Safety analysis capacity; h) Promotion of safety and training; i) Documentation on safety and information management; j) Safety oversight and safety efficiency monitoring.		
2.4.5 Assist the participating States and organisations in the implementation of the model action plan, including the programming of the necessary coordination and training activities.		
2.4.6 Draft a final report on the activities carried out, including the relevant recommendations.		

RESULT 2.5	**Adoption of safety assessment programmes by the corresponding organisations of each State**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 2.5	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
2.5.1 Obtain and complete the information, learning about the current status with respect to the adoption of safety assessment programmes by the corresponding organisations in the participating States and organisations.		
2.5.2 Develop a model action plan, based on the information obtained and the guidelines of the safety management manual (Doc 9859), to be used by the participating States and organisations for the adoption of a safety assessment programme by the corresponding organisations, that will permit: a) The identification of requirements regarding when safety assessments should be conducted; b) The drafting of safety assessment procedures; c) The development of organisational hazard classification criteria for the hazards identified; d) The development of safety assessment acceptance criteria; and e) The development of documentation and process requirements to maintain and disseminate the safety information derived from the assessments.		
2.5.3 Assist the participating States and organisations in the implementation of the model action plan for safety assessment, including the programming of the necessary coordination and training activities, and taking into account the following steps: a) Drafting (or obtention) of a complete description of the system to be assessed and of the environment where the system will operate; b) Identification of hazards; c) Rating the seriousness of the consequences of a possible hazard; d) Identifying the likelihood of occurrence of a hazard; e) Risk assessment; f) Risk mitigation; g) Drafting of safety assessment documents.		
2.5.4 Draft a final report of the activities carried out, including the relevant recommendations.		
RESULT 2.6	**Training of at least 100 officials in matters related to the preceding results**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 2.6	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
2.6.1 Develop training programmes to disseminate the safety culture among the corresponding organisations, and a modern prevention-based safety approach, taking into account the following factors: a) Legal and regulatory framework, based on ICAO standards and recommended practices; b) Application of scientifically-based risk management methods; c) Commitment by top management to safety management; d) A corporate safety culture that promotes safe practices, encourages safety-related communications, and enables active safety management, giving the results the same attention as that given to financial management; e) Effective application of standard operational procedures, including the use of checklists and information sessions; f) A non-punitive environment (or justice culture) in order to encourage an effective reporting of incidents and hazards; g) Systems to collect, analyse and share safety-related data generated by normal operations; h) Competent investigation of serious accidents and incidents that permits the identification of systemic safety-related deficiencies (instead of finding someone to blame);		

i) Integration of safety training (including human factors) for operational personnel; j) Forms of sharing the experience gained and best safety practices, through an active exchange of safety information (between companies and States); and k) Systemic safety oversight and efficiency monitoring, in order to assess safety efficiency and reducing or eliminating new problems.		
2.6.2 Identify the necessary requirements for organising and conducting each activity, following the sequence of actions defined for Result 1.9.		
IMMEDIATE OBJECTIVE Nº 3	**Develop a strategy for the operational implementation and integration of automated air traffic management systems, with a safe, gradual, evolutionary, and interoperable vision that facilitates the exchange of information and collaborative decision-making with respect to all the components of the ATM system.**	
RESULT 3.1	**Existing ATC automated systems integrated.**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 3.1	**DELIVERABLES/INDICATORS** **YEAR**	**REMARKS**
3.1.1 Update and complete the information collected under regional project RLA/98/003 with regrd to SAM automation, and develop: a) an interface control document (ICD); b) the interconnection of automated systems in the SAM Region.		
3.1.2 Analyse the operational scenarios of current and planned ATS, with a view to determining the operational requirements for the short- and medium-term integration of existing automated systems and other operational requirements to meet future ATM expectations, as well as the identification of system requirements for non-automated ATS units.		
3.1.3 Considering the strategy for the integration and implementation of automated systems in the CAR/SAM Regions, contained in Appendix K to agenda item 3 of the GREPECAS/12 report, draft an action plan for the interconnection of ATC automated systems among adjacent ACCs in the SAM Region.		
3.1.4 Draft technical guidelines for the functional operation of ATM automated systems, including: a) New tools (minimum safe altitude warning, conflict prediction, conflict alert, conflict resolution advisory, path conformity control, functional integration of ground and aircraft systems); b)Input and output data and interfaces applicable to service functions and sub-functions; c)The functional breakdown required by all ATM components, in hierarchical order; d) Determination of the various operational applications, from the lowest to the highest functional level or interface; e) Technical requirements concerning interoperability, databases, equipped aircraft, software tools, etc., that will facilitate the implementation and integration of automated systems.		
3.1.5 Conduct a cost-benefit study for the implementation/integration of ATM automated systems.		
3.1.6 Develop bilateral or multilateral technical/operational agreement models, as appropriate, between States and international organisations responsible for adjacent airspaces and regions, with respect to the conduction of trials and the implementation/operational integration of automated ATM systems.		
3.1.7 Develop a plan of national and regional training activities for the personnel involved that will facilitate the implementation or integration of automated ATM systems.		
3.1.8 Give advice to the participating States and organisations regarding the implementation of the action plan for the automated systems and their integration, including the programming of the necessary coordination and training activities.		
3.1.9 Draft a final report of the activities carried out, including the relevant recommendations.		
RESULT 3.2	**Assistance for the implementation of data communication systems between ATS facilities (OLDI and AIDC)**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	

ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: X Cause: X**	
RESULT 3.2	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
3.2.1 Obtain and complete information, taking into consideration the current situation in the States and the situation of the ICAO SARPs, with respect to: a) Evaluation of the functioning of the existing OLDI and AIDC systems in the States of the Region; b) Necessary ATS operational requirements for OLDI, AIDC applications in the Region (flight notification, flight coordination, control transfer, etc.); c) Review of the existing national and regional communications infrastructure to support OLDI and AIDC applications in the Region.		
3.2.2 Prepare a regional guidance document for OLDI, AIDC implementation, which contains: a) Technical specifications for an OLDI/AIDC system; b) Possible solutions for AIDC systems interconnection in the Region; c) A trial protocol and its implementation for the interconnection of OLDI and AIDC systems in the Region; d) A study of bandwidth requirements for the interconnection of OLDI and AIDC systems at the national and regional levels; e) Mechanisms for AIDC/OLDI systems implementation; f) A study on the use of the IP protocol for the OLDI and AIDC application.		
3.2.3 Draft a final report of the activities carried out, including the relevant recommendations.		
RESULT 3.3	**Assistance for the implementation of the new flight lan format**	
CURRENT STATUS	**Progress percentage X%**	
PLANNED SCHEDULE	**Start up date: X Delivery date: X**	
ACTUAL SCHEDULE	**Start up date: X Delivery date: X Deviation: 4 Cause: X**	
RESULT 3.3	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
3.3.1 Assist States of the Region in the implementation of the new flight plan format in application of ICAO Doc 4444, 15th Edition, Amendment 1.		
3.3.2 Plan and develop the necessary meetings and training events to familiarize the personnel concerned with the implementation of the new flight plan format.		
3.3.3 Draft a final report of the activities carried out, including the relevant recommendations.		
MEETINGS	**DELIVERABLES/INDICATORS YEAR**	**REMARKS**
RLA/06/901 Project - Thirteenth meeting of the Coordination Committee RCC/13)	Annual review of activities and approval of the June 2019-2020 work plan.	In progress

MONITORING AND CONTROL OF THE PROJECT
2018 WORK PLAN

Project Nº: RLA/06/901
Title of the project: Assistance in the implementation of a ATM regional system according to the ATM operational concept and the corresponding technological support for communications, navigation, and surveillance (CNS)

Objectives and Results of the Project	ICAO Objectives			Description of Activities and Corresponding Inputs	Amount Budgeted in the Year USD	Amount Executed in the Year USD	Budget % Compliance	Scheduled Starting Date	Scheduled Completion Date	Activitiy % Compliance To Date	Implementation Dates												Remarks and Inconvenients Encountered
	A	B	C		(1)	(2)	(2)/(1)				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Immediate Objective Nº 1																							
Result1.1	X		X																				
Implementation of performance-based navigation (PBN) – (GPIs 5, 7, 10, 11, 12 and 21)				Third workshop on PANS-OPS implementation				17/09/18	21/09/18	100%													
				- Training	15,000	12,000																	
				- Miscellaneous	500	337																	
				Sub-total	**15,500**	**12,337**	80%																
Resulta 1.2	X		X																				
Assistance for the implementation of strategic air traffic flow management (ATFM) at airports				ATFM Seminar				11/06/18	15/06/18	100%													
				- Training	21,000	21,000																	
				- Miscellaneous	500	430																	
				Sub-total	**21,500**	**21,430**	100%																
Result 1.4	X																						
Assistance for the implementation of ATS Message Handling System (AMHS) and their interconnection				Advanced course on AMHS				30/07/18	03/08/18	100%													
				- Course purchase	12,000	12,000																	
				- Missions	0	2,464																	
				- Training	13,500	17,235																	
				- Simultaneous interpretation	6,300	0																	
				- Miscellaneous	500	0																	
				Sub-total	**32,300**	**31,699**	98%																
Result 1.5	X																						
Assistance for the implementation of surveillance systems, multilateration and ATS in the Region				Drafting of a study to analyse the convenience and feasibility of adopting the satellite ADS-B service proposed by AIREON				22/04/18	28/04/18	100%													
				- Missions	4,998	2,182																	
				Sub-total	**4,998**	**2,182**	44%																
Result 1.6	X																						
Action plan for the implementation of improvements to aerodrome design and management				Seminar/workshop on airport planning for the SAM Region				12/09/18	14/09/18	100%													
				- Missions	9,419	2,787																	
				- Training	10,200	10,500																	
				- Miscellaneous	500	500																	
				- Simultaneous interpretation	0	6,300																	
				Sub-total	**20,119**	**20,087**	100%																
Result 1.7	X																						
Action plan for the implementation of functional improvements to the provision of aeronautical information services				Seminar on Procedures for Air Navigation Services for the Management of Aeronautical Information (PANS-AIM)				14/11/18	16/11/18	100%													
				- Missions	9,419	0																	
				- Simultaneous interpretation	3,780	3,780																	
				- Training	20,400	13,020																	
				- Miscellaneous	500	491																	
				Sub-total	**34,099**	**17,291**	51%																
Result 1.10	X		X																				

MONITORING AND CONTROL OF THE PROJECT
2018 WORK PLAN

Project Nº: RLA/06/901
Title of the project: Assistance in the implementation of a ATM regional system according to the ATM operational concept and the corresponding technological support for communications, navigation, and surveillance (CNS)

Objectives and Results of the Project	ICAO Objectives			Description of Activities and Corresponding Inputs	Amount Budgeted in the Year USD	Amount Executed in the Year USD	Budget % Compliance	Scheduled Starting Date	Scheduled Completion Date	Activitiy % Compliance To Date	Implementation Dates	Remarks and Inconvenients Encountered
Study for the optimisation of the SAM ATS routes network				Workshop/meeting ATSRO/9				16/07/18	20/07/18	100%		
				-Training	13,500	13,500						
				- Miscellaneous	500	356						
				Sub-total	**14,000**	**13,856**	99%					
				Preparation of SAM ATS routes network, Version 05				03/09/18	21/09/18	0%		
				- Missions	12,405	0						
				Sub-total	**12,405**	**0**	0%					
				TOTAL IMMEDIATE OBJECTIVE Nº 1	**154,921**	**118,882**	77%					
Immediate Objective Nº 2												
Resultado 2.2.	X		X									
Assistance for the implementation of aeronautical meteorology quality management systems (QMS MET) that include procedures required by ISO Standard 9001:2008 in correspondence with Annex 3 provisions, in at least 10 States				Seminar on Space Weather and ICAO Weather Information Exchange Model (IWXXM)				16/07/18	20/07/18	100%		
				- Missions	5,520	2,620						
				Sub-total	**5,520**	**2,620**	47%					
				Review and updating of the SIGMET Guide				18/02/18	08/03/18	100%		
				- Missions	5,104	5,822						
				Sub-total	**5,104**	**5,822**	114%					
				TOTAL IMMEDIATE OBJECTIVE Nº 2	**10,624**	**8,442**	79%					
Immediate Objective Nº 3												
Resultado 3.2	X		X									
Assistance for the implementation of data communications systems among ATS facilities (OLDI and AIDC)				Fourth meeting on AIDC implementation				16/04/18	20/04/18	100%		
				-Missions	2,748	0						
				-Training	13,500	13,500						
				- Simultaneous Interpretation	6,300	6,300						
				- Miscellaneous	500	501						
				Sub-total	**23,048**	**20,301**	88%					
				Practical course on AIDC				26/11/18	30/11/18	0%		
				-Missions	1,465	0						
				Sub-total	**1,465**	**0**	0%					
				TOTAL IMMEDIATE OBJECTIVE Nº 3	**24,513**	**20,301**	83%					
					190,058	**147,625**	78%			**83%**		
MEETINGS												
Result	X											
Meetings				SAM/IG/21 meeting/workshop				21/05/18	25/05/18	100%		
				-Training	24,000	24,000						
				- Miscellaneous	750	750						
				- Translation	0	499						
				Sub-total	**24,750**	**25,249**	102%					
				SAM/IG/22 meeting/workshop				19/11/18	23/11/18	100%		
				- Training	45,000	39,000						
				- Miscellaneous	750	928						
				- Simultaneous interpretation	0	6,300						
				Sub-total	**45,750**	**46,228**	101%					
				Workshop/Meeting on ATS for Contingency Plans and Letters Operational Agreement (ATS/CONT/PLAN)				19/03/18	23/03/18	100%		

MONITORING AND CONTROL OF THE PROJECT
2018 WORK PLAN

Project Nº: RLA/06/901
Title of the project: Assistance in the implementation of a ATM regional system according to the ATM operational concept and the corresponding technological support for communications, navigation, and surveillance (CNS)

Objectives and Results of the Project	ICAO Objectives	Description of Activities and Corresponding Inputs	Amount Budgeted in the Year USD	Amount Executed in the Year USD	Budget % Compliance	Scheduled Starting Date	Scheduled Completion Date	Activitiy % Compliance To Date	Implementation Dates	Remarks and Inconvenients Encountered
		-Training	27,060	23,280						
		- Miscellaneous	411	411						
		-Interpretacion	6,300	6,300						
		Sub-total	**33,771**	**29,991**	89%					
		Follow-up to implementation of air navigation services (request from Colombia)				24/07/18	27/07/18	100%		
		-Missions	0	4,506						
		Sub-total	**0**	**4,506**	100%					
		Course on ASBU methodology (request from Chile)				11/11/18	16/11/18	100%		
		-Missions	0	2,024						
		Sub-total	**0**	**2,024**	100%					
		TOTAL MEETINGS	**104,271**	**107,998**	104%			**100%**		
		TOTAL IMMEDIATE OBJECTIVES	**190,058**	**150,392**	79%			**83%**		
		ADMINISTRATIVE SUPPORT	**44,000**	**33,754**						
		EQUIPMENT AND SUPPLIES	**7,000**	**17,855**						
		RAIM SERVICE								
		ADMINISTRATIVE EXPENSES	**34,532**	**50,921**						
		GRAND TOTAL	**379,861**	**360,920**	95%			**92%**		

APPENDIX D

SURVEY ON MANAGEMENT INDICATORS AND ITS RESULTS

Section I: Project assessment
Section II: Assessment of compliance with objectives
Section III: Assessment of implementation and provision of services by ICAO
Section IV: Lessons learned

Score	
5.0	Exceptional results exceeding project requirements
4.5	Exceeds requirements
4.0	Project objectives were achieved in all cases
3.5	Most project objectives were achieved
3.0	Some quality results were achieved and implemented
2.5	Some quality results were achieved but were not viable
2.0	Some results of little impact and low quality were achieved
1.5	Results not as good as expected
1.0	Results far below those expected

Survey results	Average score
Section I: Project assessment	**4.12**
Section II: Assessment of compliance with objectives	**4.18**
Section III: Assessment of implementation and services provided by ICAO	**4.13**
Section IV: Lessons learned	**N/A**
Total average	**4.14**

SURVEY ON MAANGEMENT INDICATORS AND RESULTS
I. PROJECT ASSESSMENT

1.-Project objectives **Do you think project objectives were properly established in accordance with the development priorities of your State in relation to the National Air Navigation Plan, and the reality of civil aviation?**		**Rating**
BOL	Project objectives respond to our State priorities.	4.0
BRA		3.5
COL		4.5
CHI	The objectives are very well defined and are consistent with the Institutional Air Navigation Plan 2017-2020 (PNAI)	4.0
ECU		4.0
PAR	The Project has established the objectives according to the advances in aviation, which helps the States in the development of their National Air Navigation Plans.	4.0
PER	PROJECT OBJECTIVES ARE CONSISTENT WITH THE DEVELOPMENT PRIORITIES CONTEMPLATED IN THE NATIONAL AIR NAVIGATION PLAN OF PERU, WHICH IS CURRENTLY BEING UPDATED.	4.0
URU		4.0
VEN	The Venezuelan state considers that the objectives of the project are satisfactorily well conceived	4.5
	AVERAGE	**4.1**

2.-Regional and global support **Do you think the project responds to and supports your administration in its commitments vis-a-vis the Regional and the Global Air Navigation Plans ?**		**Rating**
BOL	The support received to meet our commitments has always been available on a timely basis.	4.0
BRA		3.0
COL		4.5
CHI	The project provides fundamental support to the tasks contained in the GANP and the Regional Plan, the use of fellowships, and provides professional support for the implementation of national plans.	4.5
ECU		4.0
PAR	Guide and direct the State's commitments related to Regional and Global Air Navigation Plan.	4.0
PER		4.0
URU		4.0
VEN	Under the auspice of the project, the state has obtained significant advances in addition to active participation.	5.0
	AVERAGE	**4.1**

3.-Comments by the State(s) **Do you have any comments on project management?**		**Rating**
BOL	It responds to the proposed objectives	4.0
BRA		3.5
COL		5.0
CHI	Clearly defined objectives offer seamless direction and guidance for the project within the CNS/ATM framework	4.0
ECU		4.0
PAR	The Project Management complies fully with the objectives set by our State	4.0
PER		4.0
URU	Management is appropriate for project objectives	4.0
VEN	The project is well oriented according to the needs of the state.	4.5
	AVERAGE	**4.1**

4.- Strategy and vision **Do you think the project responds to the strategy and long-term vision of your institution?**		**Rating**
BOL	Yes, since our institution has developed a strategic plan that is in line with regional and global objectives.	4.0
BRA		3.5
COL		5.0
CHI	The Air Navigation Plan (PNAI) is consistent with the Strategic Plan of the DGAC of Chile in terms of its stratgy and long-term vision. Accordingly, the project is a tool to perform the corresponding tasks.	4.5
ECU		4.0
PAR	Yes, the project responds to the Institution's strategies, broadening the vision of the objectives we want to reach in the long term.	4.0
PER	THE PROJECT RESPONDS TO THE STRATEGIES OF THE DGAC	4.0
URU		4.0
VEN	There is an excellent accompaniment of the initiatives of the state framed in the national plan of air navigation.	4.5
	AVERAGE	**4.2**

5.- Quality of the project What do you think of the contents of this project for achieving the expected results?		Rating
BOL	The planned activities are consistent with the objectives.	4.0
BRA		3.5
COL		
CHI	Because of its contents and the way in which its objectives have been defined, the project is an efficient tool to face challenges.	4.5
ECU		4.0
PAR	The Project works in a flexible and orderly manner to comply with all the objectives set, obtaining in this way the desired results.	4.0
PER	THE CONTENT IS APPROPRIATE FOR THE OBJECTIVES	4.0
URU		4.0
VEN	The content of the project is optimal and allows flexibility in its execution.	4.5
	AVERAGE	**4.1**

6- Project resources Do you think that the financial, physical and human resources established for achieving the objectives defined in the project document are the appropriate ones?		Rating
BOL	They are appropriate.	4.0
BRA		3.5
COL		4.5
CHI	Yes, they are appropriate, and to the extent contributions and participation continue, project objectives will be fully achieved.	4.0
ECU		4.0
PAR	We consider that the project has complied with all the established objectives, referring to financial, physical and human resources.	4.0
PER	THE ALLOCATION OF RESOURCES FOR PBN, ATFM, AIM AND RECENTLY FOR A-CDM HAS INCREASED	4.0
URU		4.0
VEN	The resources are well oriented, however, it could be considered a slight increase that allows a greater participation of the delegates in each of the meetings.	4.5
	AVERAGE	**4.1**

7.-Project participants Do you think that all the parties that should participe in the project are currently involved? If not, who should be participating?		Rating
BOL		4.0
BRA		3.0
COL		5.0
CHI	The integration and the collaborative development of the various disciplines of aviation require greater integration with AGA, without losing sight of AIS/AIM and then SWIM.	4.0
ECU		4.0
PAR	Yes, there are the parts that complement the structure of the ATM operational concept and CNS technology support.	4.0
PER		4.0
URU		5.0
VEN	The project includes all the areas involved in the development of the national air navigation plan.	5.0
	AVERAGE	**4.2**

8.- Project effectiveness Is the project cost-effective compared to similar programmes or projects?		Rating
BOL	Yes, compared with other programes, it is effective.	4.0
BRA		3.5
COL		4.5
CHI	It is considered to be fully cost-effective	4.0
ECU		4.0
PAR	Work effectively while maintaining proper administration and execution.	4.0
PER	IN GENERAL TERMS, THE PROJECT IS EFFECTIVE	4.0
URU		5.0
VEN	The state has obtained excellent results in the execution of the national plan and one of the reasons has been the orientation provided by the project.	5.0
	AVERAGE	**4.2**

9.- Modification of project objectives What modifications would you suggest be made to the objectives and scope of the project?		Rating
BOL	No modifidation.	4.0
BRA		3.5
COL	As already stated, changes are being made as required. A change that needs to be considered involves drone technology management in the airspace.	5.0
CHI	None.	4.0
ECU		4.0
PAR	We have no comments for this item.	4.0
PER		4.0
URU	No changes to the objectives are deemed necessary.	4.0
VEN	The objectives and scope of the project are set out in an optimal way, but could be integrated with the objectives and scope of projects developed in the CAR region.	4.5
	AVERAGE	**4.1**

10.- Aditional information Please provide any additional information that may support or further clarify you perception of the scope of the project.	
BOL	
BRA	
COL	The issue of drone technology and its use in the airspace must be included.
CHI	Project objectives have been very well developed, covering the areas required for ATM development.
ECU	
PAR	The scope of the project has an effective participation according to the objectives set.
PER	
URU	
VEN	The project is well conceived and meets the needs of the state.

SURVEY ON MANAGEMENT INDICATORS AND ITS RESULTS
II. ASSESSMENT OF COMPLIANCE WITH OBJECTIVES

1.- Project objectives **Regarding project management by ICAO, do you think that project objectives are being met?**		**Rating**
BOL	Project management is appropriate and objectives are being met.	4.0
BRA		3.0
COL		5.0
CHI	The project could not be fully implemented without the notable support of the ICAO SAM Regional Office.	4.5
ECU		4.0
PAR	Project Management by ICAO, complies with the established schedule	4.0
PER		4.0
URU		4.0
VEN	ICAO officers in each of the areas are constantly engaged in monitoring and monitoring the execution of each of the project's parts.	5.0
	AVERAGE	**4.2**

2.- Project timetable **Do you think project objectives have been timely met according to your expectations?**		**Rating**
BOL	Yes, they are being met according to our expectations.	4.0
BRA		3.5
COL		4.0
CHI	Fully.	4.0
ECU		4.0
PAR	In all the aspects that the project concerns, the objectives have been fulfilled efficiently	4.0
PER	THE OBJECTIVES ARE BEING MET ON A TIMELY BASIS	4.0
URU		3.0
VEN	All the objectives have been fulfilled in function of the programming.	5.0
	AVERAGE	**4.0**

3.- Use of resources **Do you think resources have been efficiently used for the attainment of the objectives?**		**Rating**
BOL	Yes, the project is being properly managed.	4.0
BRA		3.0
COL		5.0
CHI	Resources are being used in accordance with project objectives.	4.5
ECU		4.0
PAR	The resources available for the Project have been efficiently used.	5.0
PER		4.0
URU		4.0
VEN	The resources have been used effectively.	5.0
	AVERAGE	**4.3**

4.- Cost of the project **Do you think that the cost of achieving the objectives is or has been appropriate?**		**Rating**
BOL	Yes, the project is being properly managed.	4.0
BRA		3.5
COL		5.0
CHI	The cost of the project, considering State contributions, the balance sheet and the use of resources, requires no comments.	4.5
ECU		4.0
PAR	All implantation or modernization has its cost. The Project has well outlined its strategies to achieve the objectives established for the entire Region	4.0
PER		4.0
URU		5.0
VEN	The Venezuelan state considers that the costs associated with the project have been adequate.	5.0
	AVERAGE	**4.3**

5.-Main achievements What are the main achievements of the project with respect to the expected results?		Rating
BOL	The technical assistance received and the availability of courses and workshops.	4.0
BRA		3.5
COL	Significant progress has been achieved in the various areas, but the most important thing is that the individual achievements of the States contribute to regional growth.	5.0
CHI	Some of the main achievements of the project are the training of professionals, the guidance material, and increased use of fellowships.	4.5
ECU		4.0
PAR	Optimization of the ATS Routes Network in the South American Region, Implementation of Performance-based Navigation (PBN), Specialization Workshop on ASBU, PANS, AIDC, ADS-B and others, have allowed States to train their experts achieving a harmonization in the Region	4.0
PER	PROMOTE THE GRADUAL IMPLEMENTATION OF PBN EN ROUTE, TERMINAL AREAS AND INSTRUMENT PROCEDURES, AS WELL THE OPERATION OF ATFM AND ACDM UNITS.	5.0
URU	Pool and guide efforts. Share experiences and best practices.	4.0
VEN	One of the main achievements has been the progress in the execution of the national air navigation plan.	5.0
	AVERAGE	**4.3**

6.- Main issues and their resolution What are the main issues that hinder the attainment of the expected results and how should they be resolved ?		Rating
BOL	The technical assistance requested takes too long to be provided. Accordingly, the introduction of "Horizontal Cooperation", as proposed at the SAM/IG- 23 meeting, seems very appropriate.	4.0
BRA		3.0
COL	For Colombia, the main issue is the high turnover in some key positions of the project. This could be mitigated through proper communication of the progress made and pending tasks, and a platform for posting achievements.	4.0
CHI	Despite the increased number of fellowships offered, participation is low.	4.0
ECU		4.0
PAR	In most cases they are Administrative - financial problems of each State. It is important that States comply with the commitments assumed with the Project, however, they are often decisions that must be made by high Authorities.	4.0
PER	THE CONTINUITY OF THE PERSONNEL INVOLVED TO THE IMPLEMENTATION OF THE VARIOUS PROJECT PROGRAMMES	4.0
URU	Overload of activities in the authority, based on the availability of resources. Adoption of requirements without taking into account cost-benefit aspects.	4.0
VEN	The Venezuelan state has not seen any problem that could affect the execution of the project.	4.5
	AVERAGE	**3.9**

7.- Additional comments Please provide additional comments on the attainment of project objectives.	
BOL	In general, the objectives were attained.
BRA	
COL	No additional comments.
CHI	None.
ECU	
PAR	The Cooperation Activities of Brazil for the development of ATM and CNS implementation with Argentina, Bolivia, Paraguay, Uruguay and Venezuela, where CNS technical training, ATS Operational and a Flight Inspection program for Paraguay were covered
PER	
URU	
VEN	No comments.

8.- Risks What new events could affect the achievement of project results? What would you recommend to address these events?	
BOL	Create communication mechanisms to continue with the project in case of any contingency.
BRA	
COL	Increased information volumes, high pace of changes and new technologies. Normally, new technologies are beneficial for the projects, but developments such as drones represent huge challenges.
CHI	The approval of the Sixth Editio of the GANP at the next Assembly (A-40) to be held in Sept. - Oct. 2019 could brind new challenges, which could be beyond the reach of the region. Therefore, it is expected that the PBIP will coordinate the desirable elements at the regional elements in order to achieve the proposed goals within a given period of time.
ECU	
PAR	What may affect the Results of the Project are the internal conflicts of each State, (financial - administrative) would be good that the Project, report the benefits that the States obtain through their contribution in the achievement of the objectives established for the Region, that generate benefits within the aeronautical community.
PER	
URU	Impact on the availability of resources
VEN	The breach of the commitments acquired by the state in the payment of project fees.

9.- Additional information Please provide any additional information that may support or further clarify you assessment of the achievement of project objectives.	
BOL	
BRA	
COL	
CHI	Objectives are so clearly defined that no comments are required.
ECU	
PAR	There are no comments for this item.
PER	
URU	
VEN	No comments.

SURVEY ON MANAGEMENT INDICATORS AND ITS RESULTS
III. ASSESSMENT OF PROJECT IMPLEMENTATION AND PROVISION OF SERVICES BY ICAO

1.- Decision-making process **Do you think that the decision-making process within the project is appropriate?**		**Rating**
BOL	Yes, it is appropriate	4.0
BRA		3.0
COL		5.0
CHI	RCC meetings enable the adoption of better decisions for project implementation, under the guidance of the ICAO SAM Secretariat. The decision-making process is highly beneficial for the attainment of project objectives and also for all the States.	4.5
ECU		4.0
PAR	The decisions taken within the Project are very adequate and are focused on fulfilling the objectives of the Project.	4.0
PER		4.0
URU		4.0
VEN	Decisions are supported and according to the demands of the state.	5.0
	AVERAGE	**4.2**

2.- Quality of the product **Do you think that the quality of the products obtained is appropriate ?**		**Rating**
BOL	Yes, it is appropriate.	4.0
BRA		3.5
COL		5.0
CHI	The deliverables have been appropriate for attaining the objectives of the project.	4.0
ECU		4.0
PAR	The quality of the products obtained is appropriate according to the established objectives. etc.	4.0
PER		4.0
URU		4.0
VEN	The quality of the products generated by the project positively satisfies the requirements of the state in terms of air navigation.	5.0
	AVERAGE	**4.2**

3.- Guidance **Do you think that the guidance for attaining project results is being followed?**		**Rating**
BOL	It is aimed at meeting the objectives.	4.0
BRA		3.0
COL		5.0
CHI	Absolutely. Progress made by the States is highly consistent with project objectives, as shown by the progress made in the implementation of the national air navigation plans and the gradual incorporation of technologies.	4.5
ECU		4.0
PAR	Follow the established schedule to reach the desired results.	4.0
PER		4.0
URU		4.0
VEN	The orientation of the project is considered satisfactory.	5.0
	AVERAGE	**4.2**

4.- Organisation and priorities **Do you think that the organisation and the priorities set in the project are appropriate?**		**Rating**
BOL	The project is being properly managed.	4.0
BRA		3.0
COL		5.0
CHI	It is in line with the progress being gradully made and priorities are based on the needs expressed by the Coordination Committee.	4.0
ECU		4.0
PAR	The actions are prioritized according to the immediate objectives.	4.0
PER		4.0
URU		4.0
VEN	It is sufficiently adjusted to the needs of the Venezuelan state.	5.0
	AVERAGE	**4.1**

5.- Change management Do you think that change management and the degree of flexibility in project management are appropriate?		Rating
BOL	Yes, they are appropriate.	4.0
BRA		3.5
COL	Sometimes, changes seem to occur faster than they can be assimilated by the project.	4.5
CHI	They are appropriate, in accordance with the progress made. Management flexibility is derived from the agreements reached (RCC) for setting priorities based on emerging needs and challenges and requirements.	4.5
ECU		4.0
PAR	They are adequate and relevant in all cases.	4.0
PER		4.0
URU		4.0
VEN	It is excellent under the scheme that "No state is left behind"	5.0
	AVERAGE	**4.2**

6.- Service provided to the State Do you think that the service provided to your States is appropriate?		Rating
BOL		4.0
BRA		3.5
COL		5.0
CHI	It has been appropriate.	4.0
ECU		4.0
PAR		4.0
PER		4.0
URU		4.0
VEN	It is considered totally adequate.	4.5
	AVERAGE	**4.1**

7.- Communication Do you think that the level of communication inside and ouside the project is appropriate?		Rating
BOL	Yes, it is appropriate.	4.0
BRA		3.0
COL		4.5
CHI	Yes, and excellent use of teleconferencing has been made as required.	4.5
ECU		3.5
PAR	In reference to training, guidance and guidance in our modernization process. Yes	4.0
PER		4.0
URU		4.0
VEN	At all times we have counted on a timely advice.	4.5
	AVERAGE	**4.0**

8.- Conflicts Is conflict management appropriate?		Rating
BOL	No conflicts have been identified.	4.0
BRA		3.0
COL		5.0
CHI	Since that there have been no conflicts, we have no comments.	4.5
ECU		3.5
PAR	There have been no conflicts this year.	4.5
PER		4.0
URU		5.0
VEN	The management has been adequate, timely and satisfactory.	4.5
	AVERAGE	**4.2**

9.- Use of resources Do you think that project resources are being used efficiently in order to obtain the expected results?		Rating
BOL	Resources are efficiently managed.	4.0
BRA		3.0
COL		5.0
CHI	Financial documents show a good management of economic resources.	4.5
ECU		4.0
PAR	Following the schedule and the objectives set by this Project, the resources have been used efficiently.	4.0
PER		4.0
URU		4.0
VEN	Resources have been used optimally.	4.5
	AVERAGE	**4.1**

10.- Relevance of mechanisms Do you think that project management mechanisms are relevant?		Rating
BOL	Yes, they are relevant.	4.0
BRA		3.5
COL		5.0
CHI	Our administration fully approves.	4.0
ECU		3.5
PAR	They are agile and concrete according to the needs proposed by the States.	4.0
PER		4.0
URU		5.0
VEN	The management mechanisms are adequate.	4.5
	AVERAGE	**4.2**

11.- Timeliness of work plans Based on its work plan, how would you rate the timeliness of the project regarding outputs, results and delivery of inputs?		Rating
BOL	Products are available on a timely manner.	4.0
BRA		3.5
COL		5.0
CHI	In this regard, we fully agree with the results and products delivered.	4.0
ECU		3.5
PAR	According to the work plan, which changes every year, in most cases the results obtained are very good	4.0
PER		4.0
URU		3.0
VEN	Totally satisfactory.	4.5
	AVERAGE	**3.9**

12.- Guidance Do you consider that the activities and products developed through the project are in line with the guidelines of ICAO, the regional offices and the air navigation plans?		Rating
BOL	Yes, they are aligned with global, regional and national guidelines.	4.0
BRA		3.5
COL		5.0
CHI	Our PNAI is fully aligned with the PBIP and the GANP, generating the proper guidance.	4.5
ECU		4.0
PAR	It is in accordance with the objectives set by ICAO, the Regional Offices and the Air Navigation Plans.	4.0
PER		5.0
URU		4.0
VEN	Everything is aligned and framed within the ICAO regulations.	4.5
	AVERAGE	**4.3**

13.- Additional information Please provide any additional information that may support or further clarify your assessment of the products and services provides through the project.	
BOL	
BRA	
COL	
CHI	To the extent possible, robust training support should be provided, especially on topics related to emerging technologies in communications, surveillance and management.
ECU	
PAR	We have no comment for this item.
PER	
URU	
VEN	No comments.

SURVEY ON MANAGEMENT INDICATORS AND ITS RESULTS
IV. LESSONS LEARNED

1.- Positive lessons learned from the project	
Provide a brief description of the positive lessons learned from project implementation.	
BOL	The project offers sufficient tools for regional integration and standardisation of the various systems, and permits efficient training by international experts .
BRA	
COL	The scholarship systems has been very useful for facilitating participation.
CHI	The fact that the project has been extended for one more period demonstrates that it has been a good tool for the performance of air navigation tasks in the region.
ECU	Project RLA/06/901 has allowed our State and other States of the Region to provide more technical training, which contributes to improved safety and quality of air navigation services.
PAR	The joint work allows us to advance in a coordinated way, contributing the experiences of each of the States that participate in the project. Likewise, through the different seminars / workshops, new contents can be incorporated, at a lower cost, with the orientation of ICAO on each of the subjects addressed.
PER	1. ANS AUTHORITIES MUST HAVE A BETTER UNDERSTANDING OF THE CONCEPTUAL BASIS OF PROJECT TASKS AND/OR ACTIVITIES, SO THAT THE STATES MAY TAKE ON SPECIFIC AND ATTAINABLE COMMITMENTS. 2. STRENGTHEN COLLABORATION PROGRAMMES AMONG SAM STATES ON ISSUES SUCH AS A-CDM AND KPIs.
URU	Possibility of exchanging experiences concerning regulatory implementation.
VEN	The project has allowed Venezuela to set the foundations for major air navigation developments.

2.- Opportunities for improvement	
Provide a brief description of the opportunities of improvement identified during project implementation.	
BOL	The project provides opportunities for improving knowledge and tools for the development of projects related to the National air navigation plan.
BRA	THE REGIONAL OFFICE SHOULD PAY MORE ATTENTION TO THE REAL NEEDS OF THE STATES.
COL	Colombia has not been able to attend many of the workshops and meetings due to travel restrictions.
CHI	Teleconferencing should be a recurrent tool to resolve issus and dynamise management in favour of rgional air navigation safety.
ECU	Activities planned and carried out under Project RLA 06/901 undoubtedly improve the level of knowledge of State experts in favour of air navigation safety and optimisation.
PAR	It is important that the coffee break service offered in the Meetings and workshops be better distributed, especially in the afternoon, taking into account that in most cases the issues of discussion exceeds the schedules established for the closing of each day.
PER	STATES MUST INFORM ON ACTUAL PERFORMANCE OF PROJECT ACTIVITIES AND TASKS. THE MAIN CAUSES HINDERING THE ACHIEVEMENT OF OBJECTIVES MUST BE DISCUSSED.
URU	
VEN	An issue to consider is improving the relationship with CAR projects.

3.- Preventive measures	
Provide a brief description of the preventive measures that could be adopted in relation to the preceding paragraph.	
BOL	Activities for the follow-up on projects and commitments must be included in order to determine if a State needs more technical assistance.
BRA	
COL	We are trying to mitigate the aforementioned issue through early submission of documents to the authorities that authorise travels abroad. Another way would be through virtual meetings to expedite work and enhance face-to-face meetings.
CHI	Self-explanatory.
ECU	Preventive measures being considered include using our own capabilities to train our experts and to establish a continuous improvement process.
PAR	Increase the budget of the Coffee Break Service and distribute at least water, coffee, etc. during evening hours.
PER	
URU	
VEN	Consideration could be given to increasing the number of coordination meetings between the CAR and SAM Regions.

Agenda Item 3: Administrative and financial situation of the Project

3.1 Under this Agenda Item, the Meeting learned about the information presented in WP/05 about the administrative and financial situation of the Project.

3.2 In this regard, as per requested by Brazil and Bolivia, the payment of its contributions for the year 2019 was confirmed with Headquarters. On the other hand, Paraguay informed that it had also made it, so the confirmation of the same by Headquarters is awaiting. In summary, the project has received income for a total of **USD 4,085,158** pertaining to cost-sharing contributions from participating States. In addition, the Project has received **USD 347,513** for miscellaneous contributions and **USD 27,474** for accrued interest, to which **USD 2,821** must be added for financial adjustments. Consequently, the income registered for the period 2007-2019 amounts to date to **USD 4,462,967**.

3.3 State pending contributions arise to the amount of **USD 214,360**. **Chart #1** presents the current situation of the participating States' cost-sharing contributions, including amounts pertaining to miscellaneous income and adjustments applied to the funds.

Chart 01 – Contributions from participating States and other Project income

Contribuciones	2007-2016		2017		2018		2019		TOTAL (2007-2019)		
	Cuota	Recibido	Cuota	Recibido	Cuota	Recibido	Cuota	Recibido	Cuota	Recibido	Pendiente
Argentina	314,953	**275,392**	35,721	**39,561**	35,721		35,721	**0**	422,116	**314,953**	107,163
Bolivia	311,133	**311,133**	35,721	**35,721**	35,721	**35,721**	35,721	**35,721**	418,296	**418,296**	0
Brasil	311,133	**311,118**	35,721	**35,736**	35,721	**35,721**	35,721	**35,721**	418,296	**418,296**	0
Chile	311,133	**316,183**	35,721	**30,221**	35,721	**50,681**	35,721	**21,211**	418,296	**418,296**	0
Colombia	144,465	**144,465**	35,721	**35,721**	35,721	**35,721**	35,721	**35,721**	251,628	**251,628**	0
Ecuador	172,243	**136,522**	35,721	**35,721**	35,721	**71,442**	35,721	**35,721**	279,406	**279,406**	0
Panamá	311,133	**311,133**	35,721	**35,721**	35,721	**35,721**	35,721	**0**	418,296	**382,575**	35,721
Paraguay	311,133	**311,043**	35,721	**0**	35,721	**71,532**	35,721	**0**	418,296	**382,575**	35,721
Perú	311,133	**307,028**	35,721	**39,826**	35,721	**35,721**	35,721	**35,721**	418,296	**418,296**	0
Uruguay	311,133	**311,037**	35,721	**35,782**	35,721	**35,738**	35,721	**0**	418,296	**382,557**	35,740
Venezuela	311,133	**311,133**	35,721	**35,706**	35,721	**35,721**	35,721	**35,721**	418,296	**418,281**	15
Sub-total	**3,120,725**	**3,046,187**	**392,931**	**359,716**	**392,931**	**443,718**	**392,931**	**235,537**	**4,299,518**	**4,085,158**	**214,360**
Intereses	16,506	**16,506**	3,821	**3,821**	**7,147**	**7,147**	**0**		27,474	**27,474**	
Otros aportes	359,239	**387,945**	-50,000	**-50,000**	**3,720**	**3,720**	**5,848**	**5,848**	318,807	**347,513**	
Ajustes	2,817	**2,817**	-4	**-4**	**8**	**8**	**0**		2,821	**2,821**	
Sub-total		**407,269**		**-46,183**		**10,875**			**349,103**	**377,809**	
TOTAL	**3,120,725**	**3,453,456**	**392,931**	**313,533**		**454,593**			**4,648,621**	**4,462,967**	**214,360**

3.4 The Meeting took note that the expenses incurred until 2018 are in the amount of **USD 3,655,850**. For 2019, the Project's estimated expenses would amount to **USD 466,526** (includes USD 75,200 for the RAIM service), making a total of **USD 4,122,376** for the 2007-2019 period.

3.5 In summary, the estimated total income of the project, including pending contributions that amounts **USD 214,360**, would arise to **USD 4,677,327.** Subtracting the estimated total expenses by the end of 2019 from this sum, there would be a balance of **USD 554,951**, which should be subtracted from the additional assistance funds of the States of **USD 19,178,** leaving a balance of **USD 535,773** to start the activities of the project to be scheduled for 2020, as reflected in **Chart # 2**.

Chart 02 – Financial situation of the Project

Income	**USD**	**Expenses**		**USD**
			2007-2016	2,857,305
Contributions received	4,085,158		2017	287,225
Miscellaneous income	347,513		2018	511,320
Interests	27,474	**Sub-total**		**3,655,850**
Adjustments	2,821	Estimated 2019 + RAIM payment		466,526
Sub-total	**4,462,967**			
Pending contributions	214,360	**Total**		**4,122,376**
Total	**4,677,327**	**Estimated balance**		**554,951**

3.6 The balance, plus the contributions payable on April 1, 2020 for a total of **USD 392,931**, would provide funds availability of **USD 928,704**. However, it is important to take into account that these funds must cover the activities of the year 2019 and the beginning of the year 2020.

Agenda Item 4: Work programme of activities for 2020

4.1 The Meeting then considered the programme of activities proposed by the Secretariat for 2020 presented in WP/06; the same that is aligned to the immediate objectives set out in the project document.

4.2 On the planned activities, Colombia offered to host the SG1 GESEA/PLAN/AERIAL SPACE meetings, SG 2 GESEA / PANS-OPS, and Regional Workshop on SIGMET and Aerodrome Warning Messages; in this sense, Colombia would be informed about the arrangements required for such changes for compliance

4.3 On the other hand, the need to update the objectives of the Project was explained, based on the new content and organization of the GANP 6th Edition, in a sequence determined by the provision of templates for the e-ANP Vol. III and the PNNA, as well as as the finalization of the catalog of performance objectives developed by the KPIs. These activities are planned to take place during the year 2020.

4.4 The need for the Project to start planning on the challenges that RPAS / UAS technology will bring was also highlighted; given that at this moment in some States are already receiving requirements in this regard. The frame of reference of this planning is found in the corresponding modules of the GANP 6th edition to be approved this year. In this regard, matters related to RPAS / UAS will continue to be analyzed in the following RCCs, as the tasks of the e-ANP and the respective PNNAs are completed.

4.5 Thus, after evaluating the proposed activities, the programme of activities for the year 2020 was approved, which is described in **Appendix A**, supplemented with the Gantt chart that appears as **Appendix B** and the list of resources to be used for each activity shown in **Appendix C** to this part of the Report. In this regard, the following Conclusion was formulated:

CONCLUSION RCC/13-01 Approval of the programme of activities for the year 2020

The Coordination Committee of the Regional Project RLA / 06/901 approves the program of activities for the year 2020, with a budget of **USD 522,353**.

APPENDIX A

RLA/06/901 PROJECT PROGRAMME OF ACTIVITIES FOR 2020

Result 1.1 Implementation of performance-based navigation (PBN)

Tasks	Deliverables	Places and dates of execution	Required resources
Workshop / Meeting of SG1 GESEA /PLAN/AIR SPACE Ref. CAP.SAM. 5 Requested by SAMIG/23	• Elaboration and consolidation of the GESEA Work Plan • Update of the operational concept document (CONOPS) for SAM airspace • Regulations for the planning of South American airspace and formulation of an instruction program for Air Space Planners. • Studies and coordination to improve the ATS Contingency Plans of the States. • Support for the formulation of the regional Plan e-ANP, Vol. III and adoption of new elements of the GANP 6th Ed.	Lima, 16 -20 March	• Mission of two (2) specialists of the Region • 6 fellowships
Workshop / Meeting of SG2 GESEA /PANS-OPS Ref. CAP.SAM. 5 Requested by SAMIG/23	• Elaboration of an action plan to implement ICAO Circular 353 in SAM Region, on transition from the RNAV nomenclature to RNP in PBN letters. • Develop Guidelines to promote the implementation of quality management in the IFP design services of States. • Study for the implementation of Visual RNAV procedures.	Lima, 06-10 July	• Mission of one (1) specialist of the Region • 07 fellowships

Result 1.3 Implementation of communications and surveillance capabilities improvements (CNS) for en-route and terminal area operations

Tasks	Deliverables	Places and dates of execution	Required resources
Workshop / Meeting of the Subgroups of the Interoperability Task Force (GT Interop) Ref. Conclusion SAM/IG/22-03	• Identify the gaps, priorities and discuss with the Industry the procedures for Interoperability issues activated by the SAM/IG Implementation Group; • Review the procedures for interconnection of systems; and • Prepare a report of the interoperability work carried out for presentation in the SAM / IG. Initial Interoperability Issues: AMHS interconnection, AIDC communication and tests for OPMET exchange in the IWXXM format.	Lima, 20 -23 April	• 10 fellowships

Result 1.4 Assistance for the implementation of ATS Message Handling System (AMHS) and their interconnection

Tasks	Deliverables	Places and dates of execution	Required resources
Workshop / Meeting of operators/supervisors of AMHS COM Centers Ref. SAM/IG/23	• AMHS routing table; and • Contingency plan.	Lima, 23-26 March	• 10 fellowships • Simultaneous interpretation

Result 1.5 Assistance for the implementation of surveillance systems, multilateration and ADS in the Region

Tasks	Deliverables	Places and dates of execution	Required resources
Seminar / Workshop on ADS-B Implementation Ref. SAM/IG/23	• ADS-B Implementation Plan in the SAM Region; and • Procedures for the exchange of surveillance information (ADS-B). •	Lima, 16-20 November	• 10 fellowships • Simultaneous interpretation

Result 1.6 Action plan for the improvements in the design and management of aerodromes

Tasks	Deliverables	Places and dates of execution	Required resources
Seminar on Ground Handling in aerodromes. Ref. CAP.SAM.6: Assist States in the implementation of policies and provisions to improve efficiency of surface operations, in particular at congested aerodromes y Nuevo manual OACI de Ground Handling	• Dissemination to the States and Industry on new ICAO guides on Ground Handling and its impact on the operation of aerodromes. • Inform to the Meeting about the Regional challenges and improvement in management processes of ground handlers, their incorporation into the ACDM and its impact on Safety.	Lima, 12-14 August	• Mission of one (01) specialist of HQ • Simultaneous interpretation
Seminar on Surface Movement Guidance and Control Systems (SMGCS). Ref. CAP.SAM.6: Assist States in the implementation of policies and provisions to improve efficiency of surface operations, in particular at congested aerodromes	• Knowledge sharing, in conjunction with the industry on the implementation of SMGCS, new available technologies and their interoperability. • Introduce concepts of the new taxiway naming convention. • Presentation of the impact of SMGCS on the prevention of runway incursions. • Conclusions on the need to implement A-SMGCS in congested airfields.	Lima, 20-22 October	• Mission of two (02) specialists of HQ • Simultaneous interpretation

Result 1.9 Training of at least 30 officers of the CAA in each subject related to the preceding Results.

Tasks	Deliverables	Places and dates of execution	Required resources
Advanced AMHS course Ref. SAM/IG/23	• Operators of AMHS COM centers trained in the advanced topics of Directory Service, Security Message Service and new formats (IWXXM, AIXM and FIXM); Y • Staff trained to review the routing and contingency plans for the Aeronautical Messages Service.	Lima, 15-19 June	• Contracting of the course • 10 fellowships • Simultaneous interpretation

Result 1.11 Proposal of a Regional Air Navigation Implementation Plan based on Performance for the SAM Region (SAM ANIP) developed

Tasks	Deliverables	Places and dates of execution	Required resources
Seminar / Workshop on Regional Air Navigation Plan Vol. III for the SAM Region and adoption activities for Regional and National plans Ref. CAP SAM 8. Decision CRPP4-3 Postponement of Vol. 3 of the E-ANP until the Sixth Edition of the GANP. GANP 6th Edition approved by the Council and submitted to the ICAO Assembly	Proposal of Vol. III of the Regional Air Navigation Plan of the CAR / SAM e-ANP for the SAM Region.	Lima, 24 - 28 August	• 10 Fellowships • Simultaneous interpretation

Result 2.1 Assistance for the implementation of quality assurance systems in AIS according to the provisions of Annexes 6, 11, 14 and 15 in not less than 10 States

Taks	Deliverables	Places and dates of execution	Required resources
Workshop / Meeting of the Transition from AIS to AIM Ref. CAP SAM.2 AN/Conf-13 Recommendation 3.1/1 i and j: That ICAO: i) through regional events, and in collaboration with the States and the industry, promote SWIM and its benefits, as described in the Manual on System-Wide Information Management (SWIM) Concept [Manual on the concept of information management of all the system (SWIM) (Doc 10039)] as well as the implementation of best practices among members of the aviation community; and j) assist States to support the implementation of Annex 15- *Aeronautical information services and Procedures for air navigation services - Aeronautical information management* (Doc 10066, PANS-AIM).	Policy for the Implementation of the Phase of the Transition Roadmap from AIS to AIM in line with Module B0-DAIM and B1-DAIM. Follow-up to the Implementation Plans for Aeronautical Information Management in an electronic environment.	Lima, 20 - 24 April	• Mission of one (01) Regional specialist on SWIM • Mission of one (01) regional specialist on e-AIP

Result 2.2 Assistance for the implementation of quality assurance systems in Aeronautical Meteorology (QMS MET) that includes the documented procedures required by ISO 9001: 2008 in accordance with the provisions of Annex 3, in no less than 10 States

Tasks	Deliverables	Places and dates of execution	Required resources
Regional Workshop on SIGMET and Aerodrome Warning Messages Ref. CAP SAM 3 Recommendation SAM COM-MET 2019, item 3.10	Form, at least 1 MET technical personnel for each State with the capacity to use tools of Prediction Meteorological Models to prepare SIGMET messages and aerodrome warnings	Lima, 11 - 13 August	• Mission of one international expert on Numerical prediction model • Mission of one (01) international expert of

Tasks	Deliverables	Places and dates of execution	Required resources
Likewise, the Secretariat was asked to study the feasibility of organizing a Regional Workshop on SIGMET, in coordination with other institutions, oriented to the entire aeronautical community (Pilots, ATCO, AIM, MET, DOV) for the year 2020.			the ICAO MET Panel

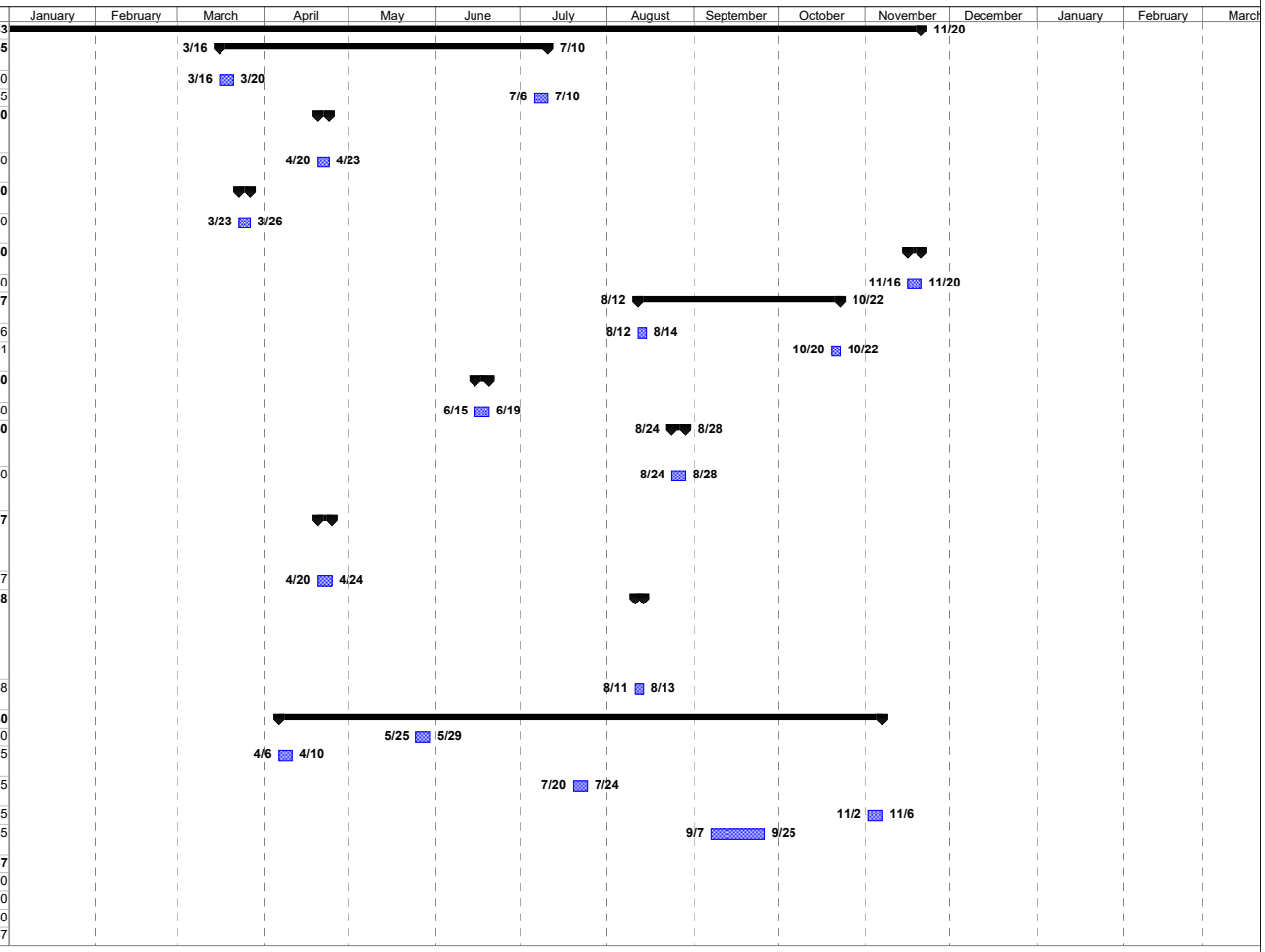
Other activities

Tasks	Deliverables	Places and dates of execution	Required resources
SAMIG/25 Ref. CAP.SAM.4 Air navigation implementation priorities considered in GREPECAS programs and Regional initiatives.	Continue with the activities of implementation and execution of the Action Plans developed by the Project in the Areas of AGA, AIM, ATM, CNS and MET	Lima, 25-29 May	• 10 fellowships ATM • 10 fellowships CNS
1st Workshop / Meeting on optimizing ATS coordination and Contingency Plans SAM/ATS/ATFM - SAM NORTH. Ref. CAP.SAM.4 Requested by SAMIG/23	• Promote the implementation of the minimum separation of 20 NM in the continental area. • Update operational agreement letters between States, including ATS Contingency Plans and including the ATFM.	Lima, 06 - 10 April	• 15 fellowships • Simultaneous interpretation (if Guyana and Suriname confirms participation)
2nd Workshop / Meeting on optimizing ATS coordination and Contingency Plans SAM/ATS/ATFM - SAM SOUTH. Ref. CAP.SAM.4 Requested by SAMIG/23	• Promote the implementation of the minimum separation of 20 NM in the continental area. • Update operational agreement letters between States, including ATS Contingency Plans and including the ATFM.	Lima, 20 - 24 July	• 15 fellowships
SAMIG/26 Ref. CAP.SAM.4 Air navigation implementation priorities considered in GREPECAS programs and Regional initiatives.	Continue with the activities of Implementation and execution of the Action Plans developed by the Project in the Areas of AGA, AIM, ATM, CNS and MET.	Lima, 2 – 6 November	• 15 fellowships ATM * • 10 fellowships CNS * Agreement letters are concluded and more ATS delegates are required.

Tasks	Deliverables	Places and dates of execution	Required resources
Review of the project document for the implementation of the regional air navigation plan for SAM	Proposal of a project document aligned to Vol. II and III of the CAR / SAM e-ANP for the SAM Region.		• 2 missions of 3 weeks each one

RLA/06/901 Regional Project 2020 Tentative Work Programme

ID	Text	Task Name	Cost
1	OE	**PROGRAMME OF ACTIVITIES FOR 2020**	**USD 522,353**
2	1.1	**Implementation of performance-based navigation (PBN)**	**USD 32,655**
3		Workshop / Meeting of SG1 GESEA /PLAN/AIR SPACE	USD 16,950
4		Workshop / Meeting of SG2 GESEA /PANS-OPS	USD 15,705
5	1.3	**Implementation of communications and surveillance capabilities improvements (CNS) for en-route and terminal area operations**	**USD 15,060**
6		Workshop / Meeting of the Subgroups of the Interoperability Task Force (GT Interop)	USD 15,060
7	1.4	**Assistance for the implementation of ATS Message Handling System (AMHS) and their interconnection**	**USD 20,100**
8		Workshop / Meeting of operators/supervisors of AMHS COM Centers	USD 20,100
9	1.5	**Assistance for the implementation of surveillance systems, multilateration and ADS in the Region**	**USD 24,250**
10		Seminar / Workshop on ADS-B Implementation	USD 24,250
11	1.6	**Action plan for the improvements in the design and management of aerodromes**	**USD 23,277**
12		Seminar on Ground Handling in aerodromes	USD 9,186
13		Seminar on Surface Movement Guidance and Control Systems (SMGCS)	USD 14,091
14	1.9	**Training of at least XX officers of the CAA in each subject related to the preceding Results**	**USD 37,250**
15		Advanced AMHS course	USD 37,250
16	1.11	**Proposal of a Regional Air Navigation Implementation Plan based on Performance for the SAM Region (SAM ANIP) developed**	**USD 24,250**
17		Seminar / Workshop on Regional Air Navigation Plan Vol. III for the SAM Region and adoption activities for Regional and National plans	USD 24,250
18	2.1	**Assistance for the implementation of quality assurance systems in AIS according to the provisions of Annexes 6, 11, 14 and 15 in not less than 10 States**	**USD 6,577**
19		Workshop / Meeting of the Transition from AIS to AIM	USD 6,577
20	2.2	**Assistance for the implementation of quality assurance systems in Aeronautical Meteorology (QMS MET) that includes the documented procedures required by ISO 9001: 2008 in accordance with the provisions of Annex 3, in no less than 10 States**	**USD 10,408**
21		Regional Workshop on SIGMET and Aerodrome Warning Messages	USD 10,408
22		**Other activities**	**USD 154,840**
23		SAM/IG/25	USD 35,650
24		1st Workshop / Meeting on optimizing ATS coordination and Contingency Plans SAM/ATS/ATFM - SAM NORTH	USD 32,975
25		2nd Workshop / Meeting on optimizing ATS coordination and Contingency Plans SAM/ATS/ATFM - SAM SOUTH	USD 26,675
26		SAM/IG/26	USD 44,375
27		Review of the project document for the implementation of the regional air navigation plan for SAM	USD 15,165
28		**Fixed costs**	**USD 173,687**
29		Administrative support	USD 44,000
30		Miscellaneous	USD 7,000
31		RAIM service	USD 75,200
32		Overhead	USD 47,487



APPENDIX C

RLA/06/901 PROJECT PROGRAMME OF ACTIVITIES FOR 2020

RESOURCES

	ACTIVITY	COSTO EN USD
	COSTO TOTAL ESTIMADO DEL PROGRAMA TENTATIVO DE ACTIVIDADES PARA EL AÑO 2020	**USD 522,353**
1.1	**Implementation of performance-based navigation (PBN)**	**USD 32,655**
	Workshop / Meeting of SG1 GESEA /PLAN/AIR SPACE	**USD 16,950**
	5-day fellowship for Lima	*USD 10,470*
	Air Ticket SAM	*USD 2,000*
	TA	*USD 376*
	DSA Lima	*USD 3,468*
	International insurance	*USD 40*
	UNDP	*USD 97*
	Coffee service	*USD 500*
	Workshop / Meeting of SG2 GESEA /PANS-OPS	**USD 15,705**
	5-day fellowship for Lima	*USD 12,215*
	Air Ticket SAM	*USD 1,000*
	TA	*USD 188*
	DSA Lima	*USD 1,734*
	International insurance	*USD 20*
	UNDP	*USD 48*
	Coffee service	*USD 500*
1.3	**Implementation of communications and surveillance capabilities improvements (CNS) for en-route and terminal area operations**	**USD 15,060**
	Workshop / Meeting of the Subgroups of the Interoperability Task Force (GT Interop)	**USD 15,060**
	Coffee service	*USD 500*
	4-day fellowship for Lima	*USD 14,560*
1.4	**Assistance for the implementation of ATS Message Handling System (AMHS) and their interconnection**	**USD 20,100**
	Workshop / Meeting of operators/supervisors of AMHS COM Centers	**USD 20,100**
	Simultaneous interpretation services	*USD 5,040*
	Coffee service	*USD 500*
	4-day fellowship for Lima	*USD 14,560*
1.5	**Assistance for the implementation of surveillance systems, multilateration and ADS in the Region**	**USD 24,250**
	Seminar / Workshop on ADS-B Implementation	**USD 24,250**
	5-day fellowship for Lima	*USD 17,450*
	Simultaneous interpretation services	*USD 6,300*
	Coffee service	*USD 500*
1.6	**Action plan for the improvements in the design and management of aerodromes**	**USD 23,277**
	Seminar on Ground Handling in aerodromes	**USD 9,186**
	Simultaneous interpretation services	*USD 3,780*
	TA	*USD 188*
	DSA Lima	*USD 1,156*
	International insurance	*USD 13*
	UNDP	*USD 48*
	Air Ticket Montreal / USA	*USD 3,500*
	Coffee service	*USD 500*
	Seminar on Surface Movement Guidance and Control Systems (SMGCS)	**USD 14,091**
	Simultaneous interpretation services	*USD 3,780*
	TA	*USD 376*
	DSA Lima	*USD 2,312*
	International insurance	*USD 27*
	UNDP	*USD 97*
	Air Ticket Montreal / USA	*USD 7,000*
	Coffee service	*USD 500*
1.9	**Training of at least XX officers of the CAA in each subject related to the preceding Results**	**USD 37,250**
	Advanced AMHS course	**USD 37,250**
	5-day fellowship for Lima	*USD 17,450*
	Simultaneous interpretation services	*USD 6,300*
	Coffee service	*USD 500*
	AMHS Course	*USD 13,000*

1.11	**Proposal of a Regional Air Navigation Implementation Plan based on Performance for the SAM Region (SAM ANIP) developed**	**USD 24,250**
	Seminar / Workshop on Regional Air Navigation Plan Vol. III for the SAM Region and adoption activities for Regional and National plans	**USD 24,250**
	5-day fellowship for Lima	*USD 17,450*
	Simultaneous interpretation services	*USD 6,300*
	Coffee service	*USD 500*
2.1	**Assistance for the implementation of quality assurance systems in AIS according to the provisions of Annexes 6, 11, 14 and 15 in not less than 10 States**	**USD 6,577**
	Workshop / Meeting of the Transition from AIS to AIM	**USD 6,577**
	Air Ticket SAM	*USD 2,000*
	TA	*USD 376*
	DSA Lima	*USD 3,468*
	International insurance	*USD 40*
	UNDP	*USD 193*
	Coffee service	*USD 500*
2.2	**Assistance for the implementation of quality assurance systems in Aeronautical Meteorology (QMS MET) that includes the documented procedures required by ISO 9001: 2008 in accordance with the provisions of Annex 3, in no less than 10 States**	**USD 10,408**
	Regional Workshop on SIGMET and Aerodrome Warning Messages	**USD 10,408**
	TA	*USD 376*
	DSA Lima	*USD 2,312*
	International insurance	*USD 27*
	UNDP	*USD 193*
	Air Ticket Montreal / USA	*USD 7,000*
	Coffee service	*USD 500*
	Other activities	**USD 139,675**
	SAM/IG/25	**USD 35,650**
	5-day fellowship for Lima	*USD 34,900*
	Coffee service	*USD 750*
	1st Workshop / Meeting on optimizing ATS coordination and Contingency Plans SAM/ATS/ATFM - SAM NORTH	**USD 32,975**
	5-day fellowship for Lima	*USD 26,175*
	Simultaneous interpretation services	*USD 6,300*
	Coffee service	*USD 500*
	2nd Workshop / Meeting on optimizing ATS coordination and Contingency Plans SAM/ATS/ATFM - SAM SOUTH	**USD 26,675**
	5-day fellowship for Lima	*USD 26,175*
	Coffee service	*USD 500*
	SAM/IG/26	**USD 44,375**
	5-day fellowship for Lima	*USD 43,625*
	Coffee service	*USD 750*
	Review of the project document for the implementation of the regional air navigation plan for SAM	**USD 15,165**
	TA	*USD 376*
	DSA Lima	*USD 11,560*
	International insurance	*USD 132*
	UNDP	*USD 97*
	Air Ticket SAM	*USD 2,000*
	Traduccion	*USD 1,000*
	Costos fijos	**USD 173,687**
	Soporte administrativo	**USD 44,000**
	Secretary	*USD 26,000*
	Financial Assistant	*USD 18,000*
	Miscellaneous	**USD 7,000**
	Miscellaneous	*USD 7,000*
	RAIM service	**USD 75,200**
	RAIM service	*USD 37,200*
	Overhead	**USD 47,487**
	Overhead	*USD 47,487*

Agenda Item 5: Other matters

5.1 Nil