

RAAC/16



**INTERNATIONAL CIVIL AVIATION ORGANIZATION
South American Regional Office**

**SIXTEENTH MEETING OF CIVIL AVIATION
AUTHORITIES OF THE SAM REGION**

RAAC/16

FINAL REPORT

(Lima, Peru, 6 – 7 December 2018)

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

TABLE OF CONTENTS

i -	Table of contents.....	i-1
ii -	History of the Meeting.....	ii-1
	Place and duration of the Meeting.....	ii-1
	Opening ceremony and other matters.....	ii-1
	Organization, Officers and Secretariat.....	ii-1
	Working languages.....	ii-2
	Agenda.....	ii-2
	Attendance.....	ii-2
	List of Conclusions.....	ii-2
iii -	List of participants.....	iii-1
	Report on Agenda Item 1.....	1-1
	Follow up on conclusions adopted by previous RAAC meetings	
	Report on Agenda Item 2.....	2-1
	Results of the meetings related to global plans	
	Report on Agenda Item 3.....	3-1
	Plan of activities of ICAO SAM Regional Office 2020-2022	
	Report on Agenda Item 4.....	4-1
	Other matters	

HISTORY OF THE MEETING

ii-1 PLACE AND DURATION OF THE MEETING

The Sixteenth Meeting of Civil Aviation Authorities of the SAM Region was held in Lima, Peru, on 6-7 December 2018.

ii-2 OPENING CEREMONY AND OTHER MATTERS

Dr. Fang Liu, Secretary General of the International Civil Aviation Organization (ICAO) acknowledged the presence of the participants and referred to the progress made in the Region with respect to safety improvements, the need to improve runway safety since these events accounted for a high percentage of accidents, and air navigation improvements. She also highlighted the effective use of a result-based approach to safety and air navigation in the Region, the Bogota Declaration and the post-declaration challenges, which called for a more ambitious long-term strategy to increase connectivity and the benefits derived from it.

Dr. Fang Liu also greeted the participants and described the global and regional developments in air transport and the work carried out by the Secretariat for the establishment of an efficient and result-based Business Plan.

Dr. Juan Carlos Pavic, Director of the General Directorate of Civil Aviation (DGAC) of Peru, addressed the Meeting, highlighting the significance of a regional vision on connectivity, safety, institutional strength, and environmental protection for Peru and inaugurated the Meeting.

ii-3 ORGANISATION, OFFICERS AND SECRETARIAT

Dr. Juan Carlos Pavic, Director of the DGAC of Peru, was elected Chairperson of the Meeting. Air Force Brig. Antonio Alarcon, Director of the National Directorate of Civil Aviation and Aeronautical Infrastructure (DINACIA) of Uruguay was elected 1st Vice-Chairperson and Eng. Alfredo Fonseca Mora, Director General of the Civil Aviation Authority of Panama, was elected 2nd Vice-Chairperson of the Meeting. Mr. Fabio Rabbani, ICAO Regional Director, acted as Secretary of the Meeting, assisted by Mr. Oscar Quesada, Deputy Regional Director and Ms. Veronica Chávez, Regional Technical Assistance Officer. Dr. Fang Liu, Secretary General of ICAO, participated in the session of 6 December.

Mr. Fabio Rabbani was assisted by the following officers of the SAM Regional Office:

Oscar Quesada	Deputy Regional Director
Marcelo Ureña	Safety Regional Officer
Verónica Chávez	Technical Assistance Officer
Pablo Lampariello	Aviation Security and Facilitation Regional Officer
Jorge Armoa	Aeronautical Information Management and Aeronautical Meteorology Regional Officer
Fernando Hermoza	Air Traffic Management and Search and Rescue Regional Office

The Meeting also acknowledged the sponsor EMPIC for its support in the area of safety oversight support systems and for exhibiting its products to the participants of the Meeting.

ii-4 **WORKING LANGUAGES**

The working languages of the Meeting and of its documentation were Spanish and English.

ii-5 **AGENDA**

The following agenda was adopted:

Agenda Item 1: Follow up on conclusions adopted by previous RAAC meetings

Agenda Item 2: Results of the meetings related to global plans

Agenda Item 3: Plan of activities of ICAO SAM Regional Office 2020-2022

Agenda Item 4: Other matters

ii-6 **ATTENDANCE**

Thirteen SAM States, one NAM/CAR State, three international organisations and one industry sponsor attended the Meeting, totalling 33 participants. The list of participants is shown on page iii-1.

ii-7 **LIST OF CONCLUSIONS**

N°	Title	Page
16/01	DRAFTING OF THE DRAFT REGIONAL PLAN FOR THE SUSTAINABILITY OF AIR TRANSPORT IN THE SAM REGION, BY AXIS	1-2
16/02	APPROVAL OF THE SAFETY AXIS OF THE DRAFT REGIONAL PLAN FOR THE SUSTAINABILITY OF AIR TRANSPORT IN THE SAM REGION	1-3
16/03	IMPLEMENTATION OF AN/CONF-13 RECOMMENDATIONS	2-1
16/04	SUPPORT TO GASEP IMPLEMENTATION ACTIVITIES IN THE REGION	2-3
16/05	FOLLOW-UP TO OSS IMPLEMENTATION	4-1
16/06	APPROVAL FOR THE CREATION OF THE SAM STATES' WORKING GROUP TO SUPPORT STATES IN THE DEVELOPMENT OF ICAO USOAP CMA ACTIVITIES	4-3

LIST OF PARTICIPANTS**ARGENTINA**

1. Tomás Insausti

BOLIVIA

2. Celier Arispe Rosas
3. Francisco Santiago Pergolesi

BRASIL / BRAZIL

4. José Ricardo Pataro Botelho de Queiroz
5. Jeferson Domingues de Freitas
6. Ary Rodrigues Bertolino
7. Marcelo Moraes de Oliveira

CHILE

8. Germán A. Olave
9. Jaime Binder

COLOMBIA

10. Arnaud Penent D'izarn Benavides

ECUADOR

11. Aurelio Hidalgo
12. Carlos Javier Alvarez Mantilla
13. Maria Luisa Ortega

ESTADOS UNIDOS / UNITED STATES

14. Christopher Barks
15. Claudio Bartolucci

GUYANA

16. Lt. Col. Egbert Field

PANAMA

17. Alfredo Fonseca Mora

PARAGUAY

18. Edgar Alberto Melgarejo Ginard
19. Miguel Candia

PERÚ

20. Juan Carlos Pavic Moreno
21. Verónica Pajuelo
22. Eliseo Salcedo
23. Fredy Nuñez
24. José Moreno

SURINAME

25. Faizel Baarn

URUGUAY

26. Antonio Alarcón
27. Marcos Revetria

VENEZUELA

28. Carlos Mata Sosa
29. Gustavo Ferrer Coa

ALTA

30. Nicole Lorca

CANSO

31. Franklin Hoyer

CLAC/LACAC

32. Marco Ospina Yépez

EMPIC

33. Jorg Kottenbrink

OACI / ICAO

34. Fang Liu
35. Melvin Cintrón
36. Fabio Rahnemay Rabbani
37. Denis Guindon
38. Oscar Quesada Carboni
39. Javier López
40. Marcelo Ureña
41. Verónica Chávez
42. Pablo Lampariello
43. Jorge Armoa
44. Fernando Hermoza
45. Pamela Burga

Agenda Item 1: Follow up on conclusions adopted by previous RAAC meetings

1.1 Under this Agenda item, the following working papers were presented:

- WP/02 – *Follow up on conclusions adopted by previous RAAC meetings* (presented by the Secretariat)
- WP/03 – *Update on the analysis of the Regional Plan for the Sustainability of Air Transport in the SAM Region* (presented by the Secretariat)

1.2 The Meeting reviewed the status of implementation of outstanding conclusions formulated by the RAAC/15 and previous meetings. **Appendix A**¹ to this agenda item contains the results of this review.

1.3 Based on the analysis of the 13 valid conclusions, Conclusion 13/5A was considered finalised, while the remaining ones were considered to be still valid.

1.4 Regarding Conclusion RAAC 15/7 on action taken for the development of the Regional plan for the sustainability of air transport in the SAM Region, Brazil requested a discussion about its interpretation. Accordingly, the Chairperson proposed to proceed with the discussion of the working paper concerning the update on the analysis of the aforementioned Regional Plan.

Regional Plan for the Sustainability of Air Transport in the SAM Region

1.5 The Meeting was then presented with the action taken for the drafting of the Regional Plan for the sustainability of air transport in the SAM Region and the statement document on its implementation, as required in Conclusion RAAC15/7.

1.6 In this respect, the Meeting took note of the establishment of the working group for the drafting of the SAM Plan (see Appendix B to this agenda item²), which had held three virtual meeting during the year, in which the group had established teams for each axis of the draft SAM Plan and had reviewed the draft “*Declaration to promote connectivity, through the development and sustainability of air transport in the Pan-American Region – Vision 2020-2035*”

1.7 During the First Virtual Meeting, information was provided regarding the ICAO World Aviation Forum (IWAF) (17-19 September 2018, Fortaleza, Brazil), and the opportunity for endorsing the aspirational declaration of the SAM Plan; for this reason, activities were undertaken to review this document. The first draft was reviewed in the Second Virtual Meeting and continued its revision in the Third Virtual Meeting; likewise, the proposal was reviewed at ICAO Headquarters in Montreal and taking into account that Latin American countries would be attending the IWAF/4 meeting, it was deemed advisable to extend the Declaration to cover Latin America as a whole.

1.8 As agreed during the Third Virtual Meeting, the declaration would make no reference to the SAM Plan in order to give it a broader Pan-American context, addressing the concerns expressed and giving sufficient time to the working groups to discuss and define the specific action plans for each axis.

¹ Appendix to WP/02

² Appendix B to WP/03

1.9 Subsequently, after coordinating the corresponding consultation with States, on 19 September, the Fourth ICAO World Aviation Forum (IWAF/4) saluted the “Declaration to promote connectivity, through the development and sustainability of air transport in the Pan-American Region – Vision 2020-2035”, which supported a regional vision and called for the development of national and regional action plans as required for the implementation of such vision. It also noted that States were ultimately responsible for the follow-up and review of the progress made. During the IWAF/4, the President of ICAO, Dr. Bernard Aliu, entrusted Brazil, as the host country, to consult the final text of the declaration with the States and submit it to the ICAO Council.

1.10 Within this context, there was an exchange of ideas in the sense that Conclusion RAAC 15/7 did not represent an approval of the Regional Plan by the States and that each axis proposed by the working groups required further study. It was also noted that ICAO documents and global plans already existed that could be considered sufficient for the Region and for State planning.

1.11 States expressed their support to the draft plan; nevertheless, several States indicated the need to modify the working methodology for its analysis in order to ensure that the concerns expressed by the States are appropriately identified and addressed. It was also expressed that the plan was aligned with ICAO strategic objectives and that the current approval only covered the Safety Axis, which represents the SAM Safety Plan (SAM-SP) in accordance with the GASP; it also considered that the Region could not move backwards in this regional initiative.

1.12 Following a debate, the Meeting agreed that what currently existed was a Draft Plan, and that an analysis of each axis was required by the work teams. The Secretariat clarified that State sovereignty principles were embodied at the highest level in the Chicago Convention and, thus, the draft plan would take this aspect into account. This draft plan did take into account State sovereignty, and consequently its documents were not binding.

1.13 Accordingly, the Meeting approved the following conclusion:

CONCLUSION RAAC 16/01		DRAFTING OF THE DRAFT REGIONAL PLAN FOR THE SUSTAINABILITY OF AIR TRANSPORT IN THE SAM REGION, BY AXIS
<p>That:</p> <p>Recognizing that each State has full and exclusive sovereignty of the airspace over its territory, in order to develop the draft Regional Plan for the sustainability of air transport in the SAM Region, the following must be accomplished:</p> <p>a) Maintain the denomination “Draft Plan” until such time that this Meeting approves the final text;</p> <p>b) Ensure the active participation of each team of experts of the States in the activities concerning the four axes of the draft plan.</p>	<p>Expected impact:</p> <p><input checked="" type="checkbox"/> Political / global</p> <p><input checked="" type="checkbox"/> Interregional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input checked="" type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Technical / operational</p>	
<p>Why:</p> <p>To follow the guidelines of the GASP, GANP, and GASep, in line with the commitments of the IWAF/4 declaration.</p>		

When: Before 2020	Status: Approved at the RAAC/16 meeting
Who: <input type="checkbox"/> Coordinators <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO Secretariat <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Others:	

1.14 The Meeting reviewed the safety axis of the draft plan, which had held several virtual meetings, noting that on 22 November 2018, the task force had adopted the proposal and agreed that the document should be submitted to the RAAC/16 meeting for approval.

1.15 In this regard, it was noted that this proposed document was suitable for approval. One State requested not to characterise the SRVSOP in a “tactical” role, since that could lead to different interpretations and could detract from the true role it played for the benefit of safety in the Region. It was also requested that safety indicators be subject to periodic reviews to validate their relevance. The Meeting formulated the following conclusion:

CONCLUSION RAAC 16/02		APPROVAL OF THE SAFETY AXIS OF THE DRAFT REGIONAL PLAN FOR THE SUSTAINABILITY OF AIR TRANSPORT IN THE SAM REGION	
That: South American States approve the safety axis of the Draft Regional Plan for the sustainability of air transport in the SAM Region – SAM Safety Plan.		Expected impact: <input checked="" type="checkbox"/> Political / global <input checked="" type="checkbox"/> Interregional <input checked="" type="checkbox"/> Economic <input checked="" type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/operational	
Why: To comply with the guidelines of the Global aviation safety plan (GASP), in line with the commitments of the declaration of IWAF/4.			
When: 7 December 2018		Status: Approved at the RAAC/16 meeting	
Who: <input type="checkbox"/> Coordinators <input checked="" type="checkbox"/> States <input type="checkbox"/> ICAO Secretariat <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Others:			

1.16 Finally, the Meeting took note that the *Connectivity*, *Institutional strength*, and *Environmental protection* axes had established working teams, and that the Secretariat was preparing a work plan proposal in order to start the corresponding activities.

REVIEW OF RAAC COMPLETED OR SUPERSEDED CONCLUSIONS

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
9/5 A, B	EXCHANGE OF SECONDARY RADAR DATA	That the SAM States assign high priority to the exchange of SSR radar data among adjacent ATC units and develop the necessary bilateral agreements on this matter.	MoUs were established and signed between Argentina-Brazil, Argentina-Uruguay, Argentina-Chile, Brazil- Uruguay, Brazil-Venezuela and Brazil-Peru for the exchange of surveillance and flight plan data in order to increase safety of air traffic control in transfer areas between adjacent ACCs. These MoUs were established between 2010 and 2012. So far, out of the activities contemplated in these MoUs, the radar data exchange between Argentina and Uruguay has been implemented and put into operation, and positive radar data exchange tests have been carried out between Brazil and Venezuela (2015) and between Argentina and Chile (October 2017). The implementation of radar data with Brazil was interrupted because it was not possible to use the asterix 62/63	ICAO Regional Office	Valid	Exchange of SSR radar data implemented	Dec 2018

ICAO Strategic Objectives:

A: Safety

B: Capacity and efficiency

C: Safety and facilitation

D: Economic development

E: Environmental protection

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
			protocol required by Brazil. Argentina and Peru resumed coordination with Brazil in November 2017 for the implementation of radar data interconnection using the asterix 62/63 protocol in view of the fact that their systems were already capable of processing and transmitting those protocols.				
11/1 A, B	GRADUAL IMPLEMENTATION OF GNSS TECHNOLOGY	That the SAM States gradually implement GNSS technology in keeping with regional PBN implementation programmes and their respective national plan.	<p>SAM States have started GNSS implementation in support to en-route, terminal and non-precision approach navigation procedures (RNAV 5, RNP APCH, RNP APC AR).</p> <p>Brazil has implemented a GBAS system, currently on pre-operational phase.</p> <p>States will comply with goals established in ICAO Assembly Resolution A37/11 regarding APV procedures.</p>	Civil aviation authorities	Valid	<p>GNSS implementation.</p> <p>En route GNSS; from 162 upper airspace regional routes, 108 have been implemented with RNAV specification, completing 67% implemented (7% over considered in the Declaration of Bogota)</p> <p>A37/11 GNSS (APV) 83.7% implemented. Declaration of Bogota goal was 100% of implementation by December 2016. A37/11 is expected to be implemented for December 2019.</p>	Dec 2019

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
12/4 A, B	STRATEGY FOR THE INSTITUTIONA- LIZATION OF REDDIG AND SRVSOP	That, with the aim of giving continuity to the implementation of the Air Navigation and Safety Organization, the activities taken under consideration in the strategy shown in Appendix A be implemented.	The activities in the strategy will be considered at the RLA/03/901 (REDDIG) and RLA/99/901 (SRVSOP) RCC meetings. Meanwhile, States have agreed that the coordination of the indicated projects continue through ICAO. Project document RLA/03/901 (REDDIG), Version S, approved ICAO management until 2023. Likewise with project RLA/99/901 (SRVSOP), Version S, approved ICAO management until 2021.	ICAO, States	Valid	Strategy for the institutionalization of REDDIG and SRVSOP	Dec 2021
12/9 A, E	REGIONAL CONTINGENCY PLAN TO ADDRESS NATURAL DISASTERS AND/OR CATASTROPHIC EVENTS	That ICAO, in cooperation and coordination with the States of the South American Region, develop a Regional Contingency Plan to address natural disasters and/or catastrophic events, with a view to minimizing the impact on civil aviation and restore the operation of air navigation and airport services as soon as possible.	A guide to support the Region in the event of a volcanic ash contingency has been approved. The regional contingency plan has not been completed. A draft has been prepared, but considering that Assembly 39 has issued Resolution A39-24: Strategy on disaster risk reduction and response mechanisms in aviation , which requests the Council and the Secretariat to establish a crisis response policy and a disaster risk reduction strategy in aviation; it was decided to wait for the results of the work in HQ in this regard.	ICAO	Valid (to be determined by the meeting)	Regional contingency plan to address natural disasters and/or catastrophic events. During the Workshop/Meeting on ATS Contingency Plans, 19 to 23 March 2018, the draft guidance material for a Contingency Plan to address natural disasters and/or catastrophic events was presented. A Contingency Coordination Group	July 2019

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
						for the South American Region (CCT SAM) Group was established to support the preparation of the referred guidance material.	
13/5 A, B, E	SAM PERFORMANCE-BASED NAVIGATION IMPLEMENTATION PLAN (SAM PBIP) AS ALIGNED WITH THE ASBU	That the States of the ICAO South American Region and the international organizations involved: a) approve the SAM performance-based navigation implementation plan (SAM PBIP) as aligned with the ASBU for its regional application, as shown in Appendix A to Agenda Item 4 of the RAAC/13 meeting; and b) encourage those States that have not done so yet to amend their national performance-based air navigation plans in accordance with the guidelines contained in the aforementioned SAM PBIP.	Approved the SAM Performance-Based Navigation Implementation Plan (SAM PBIP) aligned with ASBU Follow up so that States complete the update of the national air navigation plans to be aligned with ASBU. Workshops on the preparation of the National Air Navigation Plan have been carried out in the Plurinational State of Bolivia, Guyana and Suriname to support their preparation.	States	a) Completed b) Valid So far Brazil, Chile, Colombia and Venezuela have developed their national plans aligned with ASBU	SAM Performance-Based Navigation Implementation Plan (SAM PBIP) aligned with ASBU approved. Performance-based air navigation national plans to be aligned with SAM PBIP	a) Completed b) December 2019
14-1 A	IMPROVE THE EFFICIENCY IN THE CERTIFICATION	That actions be initiated through SRVSOP, for the identification of efficiencies among FAA, EASA and the SRVSOP in the processes of certification and oversight of approved maintenance organizations, thus avoiding	During the Fourth Air Navigation and Flight Safety Directors Meeting (AN&FS/4), the FAA from United States of America, expressed interest in attending as observer, to the multinational certifications or surveillance	States of the SRVSOP	Valid	• On 28 May 2018 the FAA Senior Representative, Mr. Leandro Friedman, was informed on the dates for multi-	December 2018

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
	AND OVERSIGHT OF APPROVED MAINTENANCE ORGANIZATION	duplication of efforts	inspections that the SRVSOP carries out in the OMAs of the South American Region to understand the process. On this respect the Meeting agreed to allow the participation of the FAA in the certification or surveillance tasks in the multinational framework of the SRVSOP.			national renewals of the 4 OMAs certified on a multinational basis, so that they could schedule the participation of FAA inspectors. <ul style="list-style-type: none"> On 29 May 2018, the FAA Senior Representative, Mr. Leandro Friedman, was informed about two organizations (one from Bolivia and another from Colombia) that have requested multinational certification. When the beginning of Phase 2 is confirmed, the FAA Representative will be informed, for them to participate in the certification processes of the referred OMAs. 	
15/1	FULFILMENT OF THE COMMITMENT REGARDING LAR HARMONISATION	That SRVSOP member States make the necessary efforts to meet the deadlines established by the General Board for LAR harmonization, and present their	During this year a tool has been implemented to follow up LAR harmonization, thus, SRVSOP States are verifying their national regulations vs. the LAR	States	Valid	Harmonization of SRVSOP States' national regulations and procedures harmonized.	December 2018

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
		results to the JG/31 meeting.	corresponding to Personnel Licensing and Airworthiness. Starting January 2019 the Operations regulations will be ready for verification.				
15/2 A, B, C	PREPARATION FOR SUBSEQUENT ICAO ASSEMBLY SESSIONS AND INTERNATIONAL EVENTS, AND ACTIONS AND FOLLOW-UP TO THE RESULTS OBTAINED AT THESE EVENTS	That SAM States: a) continue participating actively at subsequent ICAO Assembly sessions and international events (conferences, symposia, and meetings); b) prepare, duly in advance, working papers in coordination with all the States of the Region, the ICAO SAM Office, and LACAC to achieve the coordination of support with all American States and other regions worldwide for subsequent ICAO Assembly sessions and other international events; c) fulfil the actions specified in outstanding ICAO Assembly resolutions, described in Doc 10075 https://www.icao.int/Meetings/a39/Documents/Resolutions/10075_en.pdf . d) analyse and respond to the letters of the ICAO Regional Secretariat, especially those concerning proposals of adoption or amendment of	In the safety area the WPs were prepared together with SAM States for the AN-Conf/13. A working group for the implementation of the UPRT in South America has been established; the USOAP CMA working group for the standardized implementation of the standards in force of related Annexes, which have not yet been implemented by the States, was also established. Active participation of SRVSOP experts panels in the analysis of the proposals for amendment of the Annexes, prior to their approval.	States	Valid	Presentation of WPs prepared at a regional basis and presented together with SAM States.	All

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
		annexes or documents, in a joint manner, under the coordination of the Secretariat, in order to adopt, to the extent possible, a regional stance.					
15/3	ACTION PLANS FOR CO ₂ REDUCTION AND ACCESSION TO THE CORSIA SCHEME	<p>That, in order to contribute to the global ICAO goals in relation to environmental protection, SAM States:</p> <p>a) continue cooperating with ICAO for a better understanding of the effects of emissions from international aviation on the climate;</p> <p>b) consider, if they have not done it yet, the adoption of measures aimed at protecting the environment from emissions from international aviation, and develop their action plans for submission to the Secretariat before June 2018;</p> <p>c) consider the development of capacities and the inclusion of MRV systems, emission units, and registration systems into their national regulations to prepare the State for accession to the CORSIA scheme;</p> <p>d) contemplate accession to the CORSIA scheme in its first phase, or when the State considers that emission measurement, registration, and</p>	<ul style="list-style-type: none"> - Follow up letters have been sent to States - A Technical Assistance workshop was carried out in Peru. - Follow up to CORSIA implementation was made through teleconferences. - Technical support regarding CORSIA was provided to Bolivia and Uruguay, with the support of Spain arranged by HQ and attended by the Regional Office. - Paraguay has submitted their Action Plan for the reduction of CO₂ emissions. 	States	Valid	SAM States with action plans on the reduction of CO ₂ emissions approved. States have associated to CORSIA plan.	December 2018

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
		reporting systems have evolved enough; and e) support the objectives of the SAM Plan related to environmental protection.					
15/4	ALIGNMENT OF THE AVSEC/FAL/RG STRATEGIC PLAN WITH THE GASeP	That the Secretariat coordinate the necessary actions for aligning the AVSEC/FAL/RG Strategic Plan with the GASeP, and present it at the AVSEC/FAL/RG/8 meeting.	A Workshop on the “Alignment of the AVSEC/FAL/RG Strategic Plan with the Global Plan for Aviation Security (GASep)” was carried out in the month of May 2018 in Lima; the GASep Regional Plan was presented and approved by the AVSEC/FAL/RG/8 Meeting.	Secretariat	Completed	AVSEC/FAL Regional Group Strategic Plan, aligned to GASeP.	May 2018
15/5	IMPLEMENTATION OF OSS	That the Authorities continue striving to implement OSS, taking into account that it is a useful and necessary tool for improving connectivity, and present their results at the AVSEC/FAL/RG/8 meeting.	Activities have begun to reach an OSS regional agreement, which involve common regulations and procedures, besides a standardized training. For further details see WP/08.	States	Valid	Implementation of an OSS regional agreement.	December 2019
15/6	STRENGTHENING CAA COMPETENCIES IN THE CONCEPT OF ECONOMIC ASSESSMENT OF ANSPs AND AERODROME OPERATORS	That the Secretariat: a) start activities for the development of the strategy for strengthening the competencies of civil aviation administrations in the concept of economic assessment of air navigation service providers (ANSPs) and aerodrome operators and present a preliminary document by mid-2018; b) for the development of the	The Secretariat is coordinating the availability of an expert through another ICAO Regional Office, which organized this type of workshop in 2018, in order that the following tasks could be carried out for the SAM Region in 2019: 1. Collection of information, best practices and analysis of the current situation in the first half of 2019. 2. Activity (seminar or	Secretariat	Valid	Analysis of the current situation and activity to strengthen CAA competencies.	December 2019

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
		<p>strategy, conduct an analysis of the current status of implementation of the guides contained in Doc 9082 in the States;</p> <p>c) carry out this activity with a collaborative approach and with the support of all the States of the Region, through the designation of the corresponding focal points by 31 January 2018, the LACAC Secretariat and IATA.</p>	<p>workshop to be determined) to strengthen CAA competencies regarding the economic assessment of Air Navigation Service Providers-ANSP and aerodromes operators in the second half of 2019.</p>				
15/7	<p>ACTION TO BE TAKEN FOR THE APPROVAL OF THE REGIONAL PLAN FOR THE SUSTAINABILITY OF AIR TRANSPORT IN THE SAM REGION AND THE DECLARATION OF IMPLEMENTATION</p>	<p>In order to develop a regional plan for the sustainability of air transport in the SAM Region and a declaration of implementation, the Directors General of Civil Aviation of the SAM Region:</p> <p>a) support the four axes of the proposal of a Regional plan for the sustainability of air transport in the SAM Region: connectivity, safety, institutional building, and environmental protection, which are aligned with ICAO strategic objectives and with the sustainable development goals of the United Nations;</p> <p>b) undertake to designate during the first quarter of 2018 focal points to be part of a group that, together with the ICAO Secretariat, the LACAC</p>	<p>During the first half of 2018 the SAM Plan Focal Points Group was established, conducting from May to August, three virtual meetings with the group.</p> <p>In relation to the analysis of the axes of the SAM PLAN, the FFPPs form a group of specialists, by axis, in charge of the analysis of said axis.</p> <p>The safety axis of the SAM Plan has been prepared with the specialists of the safety working group, reaching an agreement on its contents.</p> <p>The institutional strengthening axis intends to hold its first virtual meeting by the end of November, in which the working plan to obtain the conclusions by mid-2019 should be outlined.</p>	Secretariat States	Valid	<p>Regional Plan for the Sustainability of Air Transport in the South American Region</p> <p>During the IWAF/4 the “DECLARATION TO PROMOTE CONNECTIVITY THROUGH THE DEVELOPMENT AND SUSTAINABILITY OF AIR TRANSPORT IN THE PAN-AMERICAN REGION – VISION 2020-2035” was issued, reflecting the Pan-American vision</p>	December 2019

Concl./ Dec. Strategic Objective	Title of Conclusion/ Decision	Text of Conclusion/Decision	Follow-up Action	To be initiated by	Status	Deliverable	Target date
		<p>Secretariat, and representatives of interested international organizations, would analyse the scope of the plan in each of its axes, identify the experts that would be required for the drafting of the plan in its different axes, and establish a timetable for conducting the activities of the plan;</p> <p>c) undertake to carry out the activities defined by the group that may be required for the drafting of the aforementioned plan and its respective declaration; and</p> <p>d) undertake to participate in the teleconferences and the required face-to-face meetings.</p>	<p>More detail about what has been done in these conclusions can be found in WP/03.</p>			<p>for air transport to 2035 and the commitment of the States to support the implementation of the development of the national and regional action plans required for the implementation of such vision.</p>	

WORKING GROUPS FORMED FOR THE AXES OF THE SAM PLAN**Air connectivity axis:**

- David Dueñas (Chile)
- Amira Padron (Venezuela)
- Carlos Von Siedlitz (Panama)
- Carlos Caballero (Bolivia)
- Jorque Yanqui (Peru)
- Sergio Pérez Lauro (Uruguay)
- Virginia Silvera (Uruguay)
- Alexandra Palomino Pineda (Colombia)
- Julio Pereira (IATA)
- Filipe Reis (IATA)
- Saheed Sulaman (Guyana)

Safety axis:

- João Souza Dias Garcia (Brazil)
- Neverton Alves de Novais (Brazil)
- Paulo Henrique Inengo Nakamura (Brazil)
- Sergio Roberto Rodrigues Silva (Brazil)
- Felipe Koeller Rodrigues Silva (Brazil)
- David Romero (Venezuela)
- Fernando Torres (Peru)
- Marcos Revetria (Uruguay)
- Julio Danzov (Uruguay)
- Luis Alberto Valencia (Colombia)
- Julio Pereira (IATA)

Institutional strengthening axis:

- Marcelo Rezende Bernardes (Brazil)
- Gustavo Machado de Freitas (Brazil)
- Marcelo Moraes de Oliveira (Brazil)
- Jorge Wilson de Avila Ferreira Penna (Brazil)
- Roberto Fernandez Alves (Brazil);
- Macarena Roa (Chile)
- Luis Nuñez (Peru)
- Marisela Estrada (Venezuela)
- Pablo Simone (Uruguay)
- José Palermo (Uruguay)
- Oracio Márquez (IATA)

Environmental Protection axis:

- Marcela Braga Anselmi (Brazil)
- Rodrigo Ayres Padilha (Brazil)
- José Pereira (Venezuela)
- Pedro Cardeillac (Uruguay)
- Adriana Jackson (Uruguay)
- Arturo Luján (Peru)
- Oracio Márquez (IATA)
- Saheed Sulaman (Guyana)
- Dorsa Sabet-Rasekh (Panama)

Agenda Item 2: Results of the meetings related to global plans

2.1 Under this Agenda Item, the following working papers were presented:

- WP/04 – *Follow up on the results of ICAO Thirteenth Air Navigation Conference* (presented by the Secretariat).
- WP/05 – *Implementation of the Global Aviation Security Plan (GASeP) proposal at a regional level* (Presented by the Secretariat)

Follow up to the results of the Thirteenth Air Navigation Conference of ICAO

2.2 The Meeting took note of the results of the Thirteenth Air Navigation Conference of ICAO, whose theme was “*From development to implementation*”, which generated 52 recommendations, shown in the **Appendix**¹ to this agenda item.

2.3 After reviewing the recommendations of the AN/Conf-13, and taking into account that their implementation involved activities by the States and the Secretariat, the Meeting adopted the following conclusion.

CONCLUSION RAAC 16/03	IMPLEMENTATION OF AN/CONF-13 RECOMMENDATIONS
<p>That:</p> <p>SAM States:</p> <p>a) Take the necessary steps to implement the actions recommended in the areas of air navigation and safety; and</p> <p>b) Cooperate with ICAO in the development of documents related to the GANP, GASP and other manuals, in order to enhance such documents by taking into account regional requirements;</p> <p>the Secretariat:</p> <p>c) follow-up on the action taken by the States within the framework of AN/Conf-13 recommendations;</p> <p>d) take the necessary steps to organise regional seminars as recommended by the AN/Conf-13 in the different areas of air navigation and safety;</p> <p>e) provide technical assistance for the development of national plans and their alignment with regional plans, global</p>	<p>Expected impact:</p> <p><input checked="" type="checkbox"/> Political / global</p> <p><input checked="" type="checkbox"/> Interregional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input checked="" type="checkbox"/> Environmental</p> <p><input checked="" type="checkbox"/> Technical/operational</p>

¹ See Appendix B to WP/04

plans, and the UN sustainable development goals; and f) coordinate actions with the PIRG (GREPECAS) for the implementation of AN/Conf-13 recommendations.	
Why: In order to implement and follow up on the recommendations emanating from the AN/Conf-13	
When: Before 2022	Status: Approved at the RAAC/16 meeting
Who: <input type="checkbox"/> Coordinators <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO Secretariat <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Others:	

Implementation of the GAsEP proposal at regional level

2.4 The Meeting was then informed of the progress made in the alignment of the Regional strategic plan with GAsEP guidelines and objectives, as presented at the Regional conference on aviation security for the Americas and the Caribbean, NAM/CAR and SAM Regions, held in Panama City, Panama, on 24-27 July 2018, which agreed on the following goals:

- By 2020, 80% of States shall achieve more than 70% effective implementation (IE)
- By 2023, 90% of States shall achieve more than 85% EI
- By 2030, 100% of States shall achieve more than 90% EI

2.5 The updated Strategic Plan aligned with the GAsEP roadmap (living document) sets forth 94 tasks accompanied by 32 actions within the context of 5 priority outcomes, which are proposed as global objectives for the next triennium. In this regard, the Meeting agreed on the need to support the implementation of the Strategic Plan of the ICAO/LACAC AVSEC/FAL Regional Group. Likewise, in order to obtain more support from the States, it was deemed necessary to develop a common regulatory reference in the SAM Region to facilitate homogeneous implementation of security standards. Accordingly, it approved the following conclusion:

CONCLUSION	
RAAC 16/04	SUPPORT TO GASEP IMPLEMENTATION ACTIVITIES IN THE REGION
<p>That: South American States be urged to:</p> <p>a) continue assigning experts and sharing experiences and requirements in order to align the Strategic Plan of the Regional Group with GAsEP guidelines and objectives, with a view to strengthening international cooperation in the area of aviation security, including the harmonisation of aviation security principles, approaches and measures; exchange of information; innovation and better use of aviation security technology; as well as training and institutional strength in aviation security;</p> <p>b) continue supporting the Task Force on the Regional Aviation Security Plan, in order to follow-up on its alignment with the regional requirements, and the implementation of the GAsEP to meet its objectives; and</p> <p>c) assign human resources to the drafting of AVSEC standard regulations (LAR) in the SAM Region, in order to promote compliance with the GAsEP key priority outcomes while increasing cooperation and support among States.</p>	<p>Expected result:</p> <p><input checked="" type="checkbox"/> Political / global <input checked="" type="checkbox"/> Interregional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/operational</p>
<p>Why: In order to complete the implementation of the GAsEP.</p>	
<p>When: Before the RAAC/17 meeting</p>	<p>Status: Approved at the RAAC/16 meeting</p>
<p>Who: <input type="checkbox"/> Coordinators <input checked="" type="checkbox"/> States <input type="checkbox"/> ICAO Secretariat <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Others:</p>	

RECOMMENDATIONS ADOPTED BY AN-CONF/13**Agenda item 1:****RECOMMENDATION 1.1/1 – VISION AND OVERVIEW OF THE SIXTH EDITION OF THE *GLOBAL AIR NAVIGATION PLAN* (DOC 9750, GANP)**

That States:

- a) agree that the future *Global Air Navigation Plan* (Doc 9750, GANP), based on the outcome of the Thirteenth Air Navigation Conference (AN-Conf/13), be available as a web-based platform, including a concise, executive summary (printable) which outlined its key policies, priorities and strategies to ensure that the GANP was easily accessible to all States and key decision makers;
- b) agree with the proposed multilayer structure for the Sixth Edition of the GANP;
- c) welcome the proposed vision, performance ambitions and conceptual roadmap for the Sixth Edition of the GANP, with the inclusion of the civil-military dimension;
- d) recognize the importance of a separate but aligned GANP and *Global Aviation Safety Plan* (Doc 10004, GASP).

That ICAO:

- e) consider the establishment of a GANP Study Group comprised of Member States from all regions and industry to undertake work on future editions of the GANP;
- f) make available the GANP global strategic level (printable) in the six ICAO languages;
- g) develop online training and organize regional seminars in conjunction with the planning and implementation regional groups (PIRGs), where possible, for the familiarization of the Sixth Edition of the GANP and support the deployment and implementation of regional and national air navigation plans;
- h) develop a national air navigation plan template available for voluntary use by States, as part of the Sixth Edition of the GANP, aligned with the global and regional air navigation plans and support States in developing their national air navigation plans while taking into consideration neighbouring requirements;
- i) strengthen the relationship between the GASP, the GANP and the newly developed Global Aviation Security Plan (GASeP); and
- j) continue to work with States, international organizations, air traffic management (ATM) modernization programmes and other stakeholders on the development of the Sixth Edition of the GANP, as required for subsequent endorsement at the 40th Session of the ICAO Assembly.

RECOMMENDATION 1.2/1 - GLOBAL TECHNICAL LEVEL OF THE SIXTH EDITION OF THE GLOBAL AIR NAVIGATION PLAN (DOC 9750, GANP)

That States:

- a) agree with the proposed change management process to maintain an up-to-date aviation system block upgrade (ASBU) framework with the formal involvement of the ASBU Panel Project Team (ASBU PPT) to improve transparency, consistency and stability;
- b) agree, in principle, with the updated ASBU framework and consider the initial version of the basic building block (BBB) framework;

That ICAO:

- c) map the global technical level of the *Global Air Navigation Plan* (Doc 9750, GANP) with the strategic level;
- d) make available the ASBU and BBB frameworks in an interactive and simplified format, as part of the web-based GANP Portal, emphasizing the relationship between both frameworks, and between the frameworks and the regional air navigation plan (ANP) elements;
- e) enable the capability, within the GANP Portal, to upload relevant information related to the development and deployment of the ASBU and proposed BBB frameworks in order to allow States, regions and industry to share information;
- f) incorporate a flexible framework for emerging air navigation concepts such as unmanned aircraft systems (UAS), UAS traffic management (UTM), Big Data and the aviation Internet, into future editions of the GANP;
- g) include a Global Aeronautical Distress and Safety System (GADSS) thread in the Sixth Edition of the GANP in line with ICAO provisions;
- h) design a thread for a Global Aviation Internet Network in the GANP, in coordination with aviation and non-aviation-related industries;
- i) emphasize and enhance a human-centric approach to system design and processes for change management;
- j) support the conduct of trials for new air navigation concepts as outlined in the ASBU framework within the GANP; and
- k) continue to work with States, international organizations, air traffic management (ATM) modernization programmes and other stakeholders on the development of the global technical level of the Sixth Edition of the GANP for subsequent endorsement at the 40th Session of the ICAO Assembly.

RECOMMENDATION 1.3/1 - AIR NAVIGATION ROADMAPS

That States:

- a) provide ICAO with timely information on their modernization plans and the equipage plans of airspace users.

That States and ICAO:

- b) work collaboratively to adopt a performance-based approach for developing performance requirements and acceptable means of compliance to support the implementation of the *Global Air Navigation Plan* (Doc 9750, GANP) while considering the need for global interoperability;

That ICAO:

- c) provide air navigation roadmaps, linked to the aviation system block upgrade (ASBU) elements, within the GANP which support:
 - 1) new airspace users and emerging technologies;
 - 2) greater flexibility where possible in the choice of technologies, based on performance needs; and
 - 3) earlier adoption of new technologies and operational capabilities as they emerge, linked to the performance needs;
- d) continue to explore practical means to make use of international standards, in particular through the Standards Roundtable work with recognized standards-making organizations, to expedite the efficient development of ICAO provisions; and
- e) expedite the work on the Global Data Link Implementation Strategy and develop harmonized solutions to support air-ground data link communications.

RECOMMENDATION 1.4/1 - COST-BENEFIT ANALYSIS (CBA) IN SUPPORT OF ASSETS DEPLOYMENT

That States:

- a) perform a cost-benefit analysis (CBA) as part of all required impact assessments, in coordination with air navigation services providers (ANSPs) and among other relevant stakeholders, when defining optimum solutions for improvements in the performance of the air navigation system through the use of the aviation system block upgrades (ASBU) framework;
- b) use a simplified mechanism, if they do not have a process already in place, such as the checklist available on the Global Air Navigation Plan (GANP) Portal, for CBA of air navigation infrastructure investment projects to support improvements as described in the ASBU framework; and

That ICAO:

- c) support the implementation of applicable CBA methodologies through dedicated workshops.

Agenda Item 2:**RECOMMENDATION 2.1/1 - AERODROME CAPACITY AND EFFICIENCY ENHANCEMENT**

That States:

- a) review, as needed, all options to increase aerodrome capacity, including increasing the efficiency of existing aerodrome infrastructure, reviewing the need for investment in new infrastructure and mitigating restrictions in surrounding airspace;
- b) establish a plan for the certification of aerodromes under their jurisdiction, in accordance with their national regulations, incorporating the identification of gaps and implementation of solutions to overcome those gaps, including the assessment and development of mitigation measures in areas of non-compliance.

That ICAO:

- c) progress the work on the development of provisions related to aerodrome design and operations in support of aerodrome capacity and efficiency enhancement;
- d) explore new areas for enhancing aerodrome capacity and efficiency, including total airport management (TAM), reduced separation standards, joint civil-military aerodromes and other new initiatives and technologies such as folding wing tip (FWT);
- e) continue to provide assistance to States in the area of aerodrome certification; and
- f) monitor developments such as New Experience Travel Technologies (NEXTT) and consider the formulation of provisions, where necessary, to support its implementation.

RECOMMENDATION 2.1/2 - TOTAL AIRPORT MANAGEMENT (TAM) AND AIRPORT THROUGHPUT

That States:

- a) implement airport collaborative decision-making (A-CDM) and, when appropriate, extend A-CDM to incorporate total airport management (TAM).

That ICAO:

- b) update provisions and guidance on A-CDM by extending it to TAM with greater integration with air traffic flow management (ATFM);
- c) update provisions on wake turbulence and time-based separation; and
- d) update provisions on reduced runway separation minima.

RECOMMENDATION 2.2/1 - LONG-TERM EVOLUTION OF COMMUNICATION, NAVIGATION AND SURVEILLANCE SYSTEMS AND FREQUENCY SPECTRUM ACCESS

That States:

- a) engage in the spectrum regulatory process to ensure the continued necessary access to and protection of safety-critical aeronautical communications, navigation, and surveillance (CNS) systems;
- b) ensure through the implementation of a safety oversight programme that the designated competent authorities are involved in safety case assessments of the radio frequency environment so as to adequately protect the operational availability of aeronautical CNS systems.

That ICAO:

- c) launch a study, built on a multi-disciplinary view of the C, N and S elements and frequency spectrum, to evolve the required CNS and frequency spectrum access strategy and systems roadmap in the short, medium and long term, in a performance-based and service-oriented manner, to ensure that CNS systems remain efficient users of the spectrum resource; and
- d) develop provisions, in collaboration with States and regional modernization programmes, to support increased civil-military interoperability and synergies with the optimum reutilization opportunities from State and military aviation technologies and to take advantage of opportunities arising from new entrants, such as unmanned aircraft systems (UAS) and suborbital vehicles.

RECOMMENDATION 2.2/2 - GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) EVOLUTION

That States:

- a) when defining their air navigation strategic plans, take advantage of the improved robustness and performance offered by dual-frequency, multi constellation (DFMC) global navigation satellite system (GNSS) to deliver incremental operational benefits and encourage related industry developments;
- b) avoid, in principle, prohibiting the use of available GNSS elements if they perform according to ICAO Standards and Recommended Practices (SARPs) and can meet all safety and regulatory requirements for the intended operations;
- c) avoid mandating equipage or use of any particular GNSS core constellation or augmentation system unless clear operational benefits are offered in return and appropriate consultations have been made with the relevant airspace users;
- d) ensure implementation of ICAO provisions for publication of information related to the use of GNSS elements in aeronautical information publications (AIP);
- e) take timely action to meet the long-term goal whereby every State accepts for lateral navigation use all GNSS elements that are compliant with SARPs, thus creating a positive environment for DFMC GNSS.

That ICAO:

- f) continue the development of SARPs and guidance material for existing and future GNSS elements in coordination with recognized standards-making organizations;

- g) further develop provisions intended for States and organizations that provide GNSS services regarding publication of service performance standards, regular performance assessment and timely notification of events that may affect the service; and
- h) develop additional guidance addressing technical and regulatory aspects to assist States in their acceptance and use of existing and future GNSS elements.

RECOMMENDATION 2.3/1 - FUTURE PROVISION OF AERONAUTICAL METEOROLOGICAL SERVICE

That States:

- a) and international user organizations ensure that adequate expert capacity is applied in the collaborative management and development of aeronautical meteorological services for international air navigation;

That ICAO:

- b) ensure it has sufficient capacity and expertise to progress the work on the development of provisions related to aeronautical meteorology, including the foreseen impact on international air navigation due to climate change, to be described in the Sixth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP); and
- c) develop implementation assistance, including guidance material, for space weather information service, the provision of globally-consistent, phenomena-based hazardous meteorological information, the meteorological component of system-wide information management (SWIM), cost-recovery solutions for regional and global systems, and potential new initiatives to address issues such as the impact of climate change on aviation, including provision of meteorological services to the air traffic management (ATM) community in the context of increased tropical convective systems.

RECOMMENDATION 2.3/2 - FURTHER DEVELOPMENT OF IWXXM FOR THE EXCHANGE OF AERONAUTICAL METEOROLOGICAL INFORMATION

That States:

- a) provide ICAO with their ICAO Meteorological Information Exchange Model (IWXXM) implementation plans before 2020.

That ICAO:

- b) promote the importance of exchanging meteorological information for aeronautical purposes in compliance with the IWXXM;
- c) in close coordination with the World Meteorological Organization (WMO):
 - 1) ensure that the IWXXM format is the only standard exchange format by 2026;
 - 2) develop the policies and procedures necessary to ensure a smooth transition from traditional alpha numeric code (TAC) format to IWXXM format for the purpose of data exchange to support international air navigation, as an interim step toward full IWXXM implementation;
 - 3) promote awareness of the changes brought about by the IWXXM data format, production, dissemination and data exchange among operators; and

- 4) monitor the status of implementation of IWXXM at State and regional levels.

RECOMMENDATION 2.3/3 - PROVISION OF SPACE WEATHER INFORMATION SERVICE MEETING THE OPERATIONAL NEEDS OF USERS

That States:

- a) encourage the research of operational impacts of space weather phenomena on civil aviation using performance-based approaches and establish requirements for the use of space weather information for civil aviation.

That ICAO:

- b) continue to facilitate coordination between the space weather information service providers and aeronautical users to clarify the needs and solutions for improved safety and efficiency of civil aviation through the provision of space weather information and training on the use of the information; and
- c) coordinate with other international organizations, such as the International Telecommunication Union - Radio communication Sector (ITU-R) and the World Meteorological Organization (WMO), to facilitate research of operational impacts of space weather phenomena on civil aviation using performance-based approaches and develop requirements and/or guidance for the use of space weather information for civil aviation.

RECOMMENDATION 2.3/4 - DEVELOPMENT OF COST-RECOVERY MECHANISMS FOR THE PROVISION OF AERONAUTICAL METEOROLOGICAL INFORMATION

That ICAO:

- a) support the need to expeditiously identify how aeronautical meteorological service provision has changed, how it will continue to evolve, and how these changes (including those arising from the impact of climate change on aviation) may affect the recovery of relevant costs associated with service provision on a global, multi-regional, regional, and sub-regional basis; and
- b) in close coordination with the World Meteorological Organization (WMO):
 - 1) review deficiencies in the current cost-recovery systems;
 - 2) identify new cost-recovery challenges that have arisen (taking into consideration the issues described in a) above); and
 - 3) identify possible mechanisms to recover these costs in a manner consistent with *ICAO's Policies on Charges for Airports and Air Navigation Services* (Doc 9082).

Agenda Item 3:**RECOMMENDATION 3.1/1 - SYSTEM-WIDE INFORMATION MANAGEMENT (SWIM)**

That States:

- a) support developments and implementation of system-wide information management;
- b) via the mechanism of the planning and implementation regional groups (PIRGs), showcase regional system-wide information management (SWIM) demonstrations, highlighting the operational and economic benefits of SWIM, and evaluate possible transition and mixed-mode scenarios;
- c) share information, lessons learned and observations regarding SWIM development and implementation;
- d) develop national implementation plans in alignment with regional strategies and priorities and in accordance with the strategy outlined in the *Global Air Navigation Plan* (Doc 9750, GANP) which would include SWIM.

That ICAO:

- e) while making use of already developed Standards and best practices, continue the development of provisions related to information services, while including relevant guidance, governance aspects, information content and related information exchange models, and supporting technical infrastructure and governance for SWIM in sufficient detail to ensure safe, efficient and secure globally seamless operations;
- f) consider the concept of a global SWIM framework as part of the GANP and the aviation system block upgrades (ASBUs);
- g) consider security-by-design principles when developing interconnected trusted global SWIM frameworks;
- h) develop provisions related to the harmonization of information exchange models and globally interconnected registries;
- i) through regional events, and in collaboration with States and industry, promote SWIM and its benefits, as described in the *Manual on System-wide Information Management* (Doc 10039), as well as implementation best practices to the aviation community; and
- j) provide assistance to States to support the implementation of Annex 15 - *Aeronautical Information Services* and *Procedures for Air Navigation Services - Aeronautical Information Management* (Doc 10066, PANS-AIM).

RECOMMENDATION 3.2/1 -TRAJECTORY-BASED OPERATIONS (TBO)

That States, along with stakeholders:

- a) continue to provide ICAO with the developments and lessons learned from air traffic management (ATM) modernization programmes;

- b) work through ICAO to identify and address, not only potential issues, but also opportunities such as the improved management of global traffic flows through a global network-centric approach to ensure the successful development and implementation of trajectory-based operations (TBO);
- c) through the mechanism of the planning and implementation regional groups (PIRGs), integrate current implementation efforts with regional transition plans for flight and flow information for a collaborative environment (FF-ICE), system-wide information management (SWIM) and TBO.

That ICAO:

- d) finalize the global TBO concept and its elements in the Sixth edition of the *Global Air Navigation Plan* (Doc 9750, GANP) and the aviation systems block upgrade (ASBU) framework; and
- e) develop guidance on transitioning to a globally interoperable TBO environment in the context of on-going ATM initiatives while addressing all domains of ATM systems and taking into consideration existing and new types of airspace users.

RECOMMENDATION 3.2/2 - FLIGHT AND FLOW INFORMATION FOR A COLLABORATIVE ENVIRONMENT (FF-ICE)

That States, along with stakeholders:

- a) work through ICAO to finalize ICAO provisions and guidance material, in support of the initial implementation of flight and flow information for a collaborative environment (FF-ICE) by providing the results of operational and technical performance validation and cost-benefit analysis (CBA);

That ICAO:

- b) develop a robust transition strategy to minimize any potential negative impacts during the mixed mode operations of current ICAO flight plan processing and FF-ICE; and
- c) continue its work concerning the investigation of necessary information exchange content and supporting processes for the next evolution of FF-ICE.

RECOMMENDATION 3.3/1 - NETWORK OPERATIONS (NOPS)

That States:

- a) implement collaborative decision-making (CDM) processes in support of effective airspace management in the provision of air navigation services, including cross-border operations and resource management;
- b) plan and implement, according to their operational needs, operational improvements related to network operations in a coordinated manner within and across regions.

That ICAO:

- c) develop further provisions and guidance material on air traffic flow management (ATFM), supporting a global collaborative network management in support of trajectory-based operations (TBO); and
- d) support, through its Regional Offices, the sharing of best practices and the advancement of technical cooperation agreements between States in order to implement ATFM.

RECOMMENDATION 3.4/1 - CIVIL-MILITARY COLLABORATION

That States:

- a) actively collaborate with their military authorities, including at the regional level, and encourage greater civil-military interoperability and appropriate use of performance equivalence;
- b) continuously inform their military authorities of the improvements to air navigation capacity and efficiency, safety, cyber threats and system resilience put forth by ICAO and advocate collaboration with ICAO at the global and regional levels;

That ICAO:

- c) identify potential opportunities for civil-military collaboration, develop a mechanism to collaborate with the military community early in the development of global provisions and guidance, and establish guidance for collaboration with the military community at global and regional levels;
- d) incorporate the military dimension, including civil-military cooperation and collaboration, in future editions of the *Global Air Navigation Plan* (Doc 9750, GANP);
- e) consider, with urgency and in collaboration with the military community, the interoperability and governance principles for the military community in system-wide information management (SWIM) and in the development of the ICAO trust framework; and
- f) consider, where possible, the inclusion of civil-military cooperation and collaboration subjects at ICAO events, and highlight the participation of military authorities in relevant State letter invitations.

RECOMMENDATION 3.4/2 - CIVIL-MILITARY COOPERATION IMPLEMENTATION

That States:

- a) encourage their military authorities to cooperate and coordinate with civil aviation authorities and air navigation services providers (ANSPs) on airspace use, including airspace access requirements, to achieve the most efficient use of airspace based on actual needs and, when possible, avoid permanent airspace segregation;

That ICAO:

- b) promote civil-military coordination and cooperation of best practices, and provide forums and other opportunities, such as regional symposiums, for States to exchange best practices; and
- c) explore opportunities to provide guidance to enhance safety at joint civil-military aerodromes and to assist States in the promulgation of clear procedures for airspace access requirements.

RECOMMENDATION 3.5/1 - ICAO LOCATION INDICATOR SYSTEM AND DATABASE OF SIGNIFICANT POINTS

That States and industry stakeholders:

- a) urgently complete the population of the ICAO International Codes and Routes Designators (ICARD) database with all five-letter name codes (5LNC) used worldwide to ensure the accuracy of the database;
- b) ensure that whenever a 5LNC that is used for military purposes is published in an ICAO Aeronautical Information Publication (AIP) and consequently coded into aircraft flight management system (FMS), such 5LNCs are coordinated through the ICARD process.

That ICAO:

- c) continue to address the limitations of both location indicator and 5LNC availabilities in the short-term and determine a long-term solution;
- d) consider, when developing such solutions, the need for global harmonization and interoperability;
- e) continue with its efforts to improve awareness and training on the use of ICARD in the regions that do not actively use ICARD;
- f) continue to work towards removing duplicated 5LNCs and sound-like conflicts; and
- g) implement improvements to the ICARD database functionality, including the use of maps depicting flight information regions (FIRs), more information regarding 5LNC history and sound-like proximity checks for codes held in reserve but not yet allocated to a region.

RECOMMENDATION 3.5/2 - COORDINATED CRISIS MANAGEMENT

That States:

- a) along with industry stakeholders, engage in an active and coordinated manner when dealing with crisis management, enhanced preparedness for disasters, contingency planning and post crisis reviews; and

That ICAO:

- b) develop guidance on a coordinated approach to crisis management, including subjects such as business continuity, the role of air traffic flow management (ATFM) in support of crisis management and the importance of post crisis reviews.

RECOMMENDATION 3.5/3 - CERTIFICATION OF ANSPS

That ICAO investigate the potential benefits, balanced against the associated costs of the development of provisions and guidance material for certification of air navigation services providers (ANSPs).

RECOMMENDATION 3.5/4 - TRUE NORTH

That ICAO conduct a detailed study into the technical, operational, and economic feasibility of changing to a "True North" reference system.

Agenda Item 4:**RECOMMENDATION 4.1/1 - STATE NATIONAL DEVELOPMENT PLANS**

That States:

- a) establish a defined connection between their air navigation and safety plans, as well as other relevant national plans;
- b) include clear references to the United Nations Sustainable Development Goals (UN SDGs) in their air navigation and safety plans, as well as in other relevant national plans, with the objective of showcasing the contribution of aviation to the UN SDGs and national economies.

That ICAO:

- c) engage with States to promote the importance of aviation development, taking into consideration environmental and socio-economic aspects, and to include aviation within their relevant national plans, and as necessary, national budgeting, which might be vital to unlocking funding for aviation needs; and
- d) develop guidance for States to include aviation within their relevant national plans taking into consideration global and regional planning.

RECOMMENDATION 4.2/1 - IMPLEMENTATION OF MINIMUM AIR NAVIGATION SERVICES

That States:

- a) consider the use of more advanced technologies and procedures, in coordination with international organizations and industry stakeholders, to provide the minimum air navigation services for international civil aviation, taking into account the principles of global interoperability and performance specification compliance;
- b) include planning for the implementation of the basic services outlined in the basic building blocks (BBB) framework within their national air navigation plans.

That ICAO:

- c) in coordination with the planning and implementation regional groups (PIRGs) and by making use of existing reporting mechanisms, verify the provision of the minimum air navigation services for international civil aviation, as outlined in the BBB framework, through the methodology for the identification of air navigation deficiencies against the regional air navigation plans;
- d) develop the necessary tools to support the PIRGs in the verification of the provision of the basic building block (BBB) services at the regional and national levels;
- e) coordinate the interoperability of systems and harmonization of procedures at a regional level, through the PIRGs, in relation to the use of advanced technologies and concepts of operations, taking into account global requirements;
- f) in line with the No Country Left Behind (NCLB) initiative, provide the necessary technical assistance to States for the provision of basic air navigation services as identified by the PIRGs and as reflected in State national air navigation plans; and

- g) urge the aviation manufacturing industry to create a testing environment for States to justify procurement decisions which guaranty interoperability and system functionality within local specific environments, as a follow-up to the provision of basic air navigation services.

RECOMMENDATION 4.3/1 - IMPROVING THE PERFORMANCE OF THE AIR NAVIGATION SYSTEM

That States:

- a) adopt and adapt as needed, the six-step performance management process for the planning and implementation of air navigation improvements and reflect this process in their national air navigation plans;
- b) align their national air navigation plans with regional plans to attain a globally harmonized performance management process and support the achievement of global performance objectives;
- c) support ICAO in promoting the No Country Left Behind (NCLB) initiative and reaffirm their commitment to the development of timely and accurate national air navigation plans aligned with regional and global plans.

That ICAO:

- d) encourage the planning and implementation regional groups (PIRGs) to embrace a performance-based approach for implementation and adopt the six-step performance management process, as described in the *Manual on Global Performance of the Air Navigation System* (Doc 9883), by reflecting the process in Volume III of all regional air navigation plans;
- e) continue to expedite the work on performance indicators related to the *Global Air Navigation Plan* (Doc 9750, GANP), including review of the work by an appropriate group of performance experts and consider establishing such an expert group under the Global Air Navigation Plan (GANP) Study Group; and
- f) examine possible operational incentives in the development of new air traffic management (ATM) concepts.

RECOMMENDATION 4.3/2 - REGIONAL AND NATIONAL COLLABORATION AND IMPLEMENTATION INITIATIVES

That States:

- a) adhere to the implementation commitments agreed at the regional level, and reflected in the regional air navigation plans, in order to effectively deploy regional initiatives;
- b) cooperate among themselves and with the industry to strengthen State implementation provisions within the framework of the No Country Left Behind (NCLB) initiative;
- c) plan the modernization of their air navigation system together with all stakeholders, based on local needs and available resources, taking into account regional and global commitments;
- d) recognize the important contribution being provided by the Africa-Indian Ocean (AFI) Plan towards the implementation of an effective regional framework for the African Air Navigation Services Provider (ANSP) Peer Review Programme to enhance the safety and efficiency of air transport operations in Africa;

- e) support the implementation of ICAO initiatives to improve the efficiency and effectiveness of regional processes;
- f) encourage the participation of high level authorities in the decision-making process for planning and implementation.

That ICAO:

- g) encourage States, regions and international organizations to support cross-border, interregional and intra-regional collaborative planning, activities and projects, supporting effective, efficient and expeditious harmonization;
- h) continue to provide support to the African air navigation services provider (ANSP) Peer Review Programme;
- i) urge States, in coordination with the industry, to support the implementation of regional priorities;
- j) support the implementation of an action plan for the development of aviation infrastructure in Africa under the Comprehensive Regional Implementation for Aviation Safety in Africa (AFI Plan);
- k) encourage States and organizations to continue sharing surveillance data to improve safety and efficiency in air traffic management;
- l) encourage regional collaboration and coordination as well as the use of incentives when planning the implementation of operational improvements to enable all stakeholders to achieve the benefits expected from the implementation; and
- m) encourage African States and industry to continue to work together within the African Flight Procedure Programme (AFPP).

RECOMMENDATION 4.4/1 - SEARCH AND RESCUE (SAR) AND THE GLOBAL AERONAUTICAL DISTRESS AND SAFETY SYSTEM (GADSS)

That States:

- a) through the planning and implementation regional groups (PIRGs), examine the possibilities of combining their respective capabilities to improve search and rescue (SAR) effectiveness;
- b) take advantage of the PIRGS to actively promote the establishment of bilateral or multilateral SAR agreements;
- c) support regional initiatives to implement SAR by organizing high level conferences in coordination with ICAO, industry and international partners.

That ICAO:

- d) complete the development of Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS) provisions related to GADSS, as necessary, and support their implementation;
- e) organize regional SAR seminars and/or workshops to facilitate implementation of the Global Aeronautical Distress and Safety System (GADSS);

- f) emphasize to States the importance of implementing Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS) provisions which support GADSS, related to aircraft tracking and to the location of an aeroplane in distress;
- g) invite the appropriate expert groups to provide advice on the implementation of GADSS;
- h) review the need for a requirement for a performance-based Standard to accurately determine the location of the end of flight, particularly over terrain, in the scope of efficient SAR operations; and
- i) include the general organization of SAR in future editions of the GANP.

Agenda Item 5:

RECOMMENDATION 5.1/1 - OPERATIONS ABOVE FLIGHT LEVEL 600

That States:

- a) with relevant experience in higher airspace operations, share, through ICAO where appropriate, their experience and expertise with other States and provide assistance to other States on the regulatory aspects of these operations;
- b) expected to benefit from higher airspace operations, agree to consider risk-based operational trials in their airspace.

That ICAO:

- c) support ongoing higher airspace operations by providing guidance and, as necessary, other provisions on the regulatory aspects of these operations;
- d) work with States and industry to share information on current and forecasted needs for higher airspace operations, to identify issues affecting the global air navigation system and to proactively address harmonization for these operations;
- e) consider establishing a multidisciplinary group of experts to consider needed criteria, operational issues, and operator and provider responsibilities for operations in higher airspace;
- f) develop a performance-based global framework for higher airspace operations considering current and future work in emerging technologies, for example, in the areas of information management and sharing, strategic planning, separation and environmental Standards, situational awareness and security; and
- g) ensure that the framework includes flights transitioning through controlled airspace and to and through airspace above FL600, as necessary.

RECOMMENDATION 5.2/1 - VERY LOW ALTITUDE OPERATIONS

That States:

- a) collect and share information regarding very low altitude operations, including on unmanned aircraft systems traffic management (UTM) systems, autonomous operations initiatives and tactical risk assessment models;
- b) ensure that UTM systems are interoperable with existing air traffic management (ATM) systems.

That ICAO:

- c) contribute to the development of operational solutions and guidance, including on UTM systems, autonomous operations and tactical risk assessment models, to support the safe and coordinated implementation of aviation activities at very low altitude, particularly in urban and suburban environments, including in the vicinity of, and into, aerodromes;
- d) continue serving as the global and regional facilitator and forum for States, industry, academia and other interested stakeholders in the development of UTM systems, including developing guidance for the identification, structuring and implementation of necessary financing mechanisms such as public-private partnerships (PPPs);
- e) continue developing provisions and guidance material for the development, harmonization and implementation of UAS regulations, consistent with the key policy principles set forth in the Global Air Navigation Plan (GANP);
- f) develop a solution to enable States to authorize operations of non-certificated UAS over the high seas, using parameters to be defined in a transparent manner, including investigating the maximum altitude at which these operations would be allowed;
- g) develop Standards and Recommended Practices (SARPs), guidance or “best practices” related to UTM, including autonomous operations, after States and regions have had sufficient time to test and validate concepts;
- h) encourage UTM providers to implement the highest level of cyber security standards that are consistent with aviation community expectations and guidelines for very low altitude airspace operations;
- i) support and coordinate the implementation of core airspace management services including, but not limited to, geofencing and geo-referencing, as well as ensuring ATM and UTM interfaces;
- j) actively cooperate with States at the regional level for the development and implementation of UTM;
- k) continue the development of a global aircraft registration network (ARN); and
- l) continue conducting awareness and educational activities amongst users, and facilitate the exchange of information amongst States regarding their UAS regulations.

RECOMMENDATION 5.3/1 - REMOTELY PILOTED AIRCRAFT SYSTEMS (RPAS)

That States:

- a) collect and share information on remotely piloted aircraft systems (RPAS) operations;
- b) actively engage industry stakeholders to collect and provide technical data to ICAO on RPAS operations needed to support the development of SARPs for RPAS, including data required for detect and avoid (DAA) and C2 Link;
- c) support the cross-disciplinary development of RPAS-related SARPs and guidance material across expert groups of ICAO.

That ICAO:

- d) continue development of the regulatory framework necessary to support the integration of RPAS into non-segregated airspace and aerodromes, and facilitate related implementation roll-out activities;
- e) continue developing guidance material to support safe RPAS operations, to facilitate implementation through regional training activities, to conduct awareness and educational activities amongst users, and to facilitate the collection and sharing of information amongst States regarding their RPAS operations and regulations;
- f) assess the work underway in its expert groups and identify additional activities required to implement RPAS-related SARPs and guidance such as DAA and C2 Link;
- g) provide an update on a fully integrated approach for ICAO's RPAS-related work programme to the 40th Session of the Assembly in 2019;
- h) in coordination with States and military stakeholders, propose the best selection for the establishment of a secondary surveillance radar (SSR) code for lost C2 Link events within appropriate Annexes, Procedures for Air Navigation Services (PANS), regional air navigation plans and other relevant documents; and
- i) consider the use of gender-neutral RPAS-related terminology, following appropriate research.

RECOMMENDATION 5.4/1 – CYBER RESILIENCE

That States:

- a) in coordination with stakeholders, provide the necessary support for ICAO to evolve the global trust framework as an enabler of flight operations in a digitally connected environment;
- b) recognize that the cyber resilience of the aviation system depends on continued coordination amongst all relevant aviation and non-aviation stakeholders;
- c) recognize the need to be prepared to respond to cyber events;
- d) in coordination with industry and international organizations, work with ICAO to increase awareness of cyber threats and system resilience processes, and coordinate cyber-related incident information sharing and training activities;
- e) recognize the need to share information related to cyber events with other States and international organizations through appropriately designated channels.

That ICAO:

- f) establish a formal project involving States, international organizations and relevant stakeholders for the urgent and transparent development of a globally harmonized aviation trust framework through a group of experts. Priority should be given to governance principles;
- g) coordinate with both aviation and non-aviation technical experts in the development of the trust framework, and in particular with the governing bodies of the Internet;
- h) incorporate the trust framework into the *Global Air Navigation Plan* (Doc 9750) in an appropriate manner to highlight its urgent need, its importance and to improve its visibility;
- i) develop, as a matter of priority, and promote high-level policies and management frameworks for cyber resilience to help mitigate cyber threats and risks to civil aviation based on international industry standards and preferably aligned or integrated with existing management systems;
- j) recognize the need for the aviation community to be prepared for and be able to respond to cyber events;
- k) encourage States and international organizations to facilitate information sharing through appropriately designated channels at the global and regional levels;
- l) promote multidisciplinary State and relevant aviation and non-aviation stakeholders collaboration on cyber information sharing;
- m) promote tabletop exercises and maintain a repository of lessons learned and scenarios available to Member States; and
- n) promote a unified framework for an integrated risk management approach to cyber resilience, taking into account all hazards and threats to the air navigation system.

RECOMMENDATION 5.5/1 - SUPERSONIC TRANSPORT (SST)

That States:

- a) monitor the developments related to the re-emergence of the supersonic transport (SST) sector and, when necessary, engage their regulatory mechanisms to ensure that the necessary policies are in place before supersonic operations become routine.

That ICAO:

- b) note the developments related to the re-emergence of the SST sector, including the work related to Appendix G of Assembly Resolution A39-1, *Consolidated statement of continuing ICAO policies and practices related to environmental protection — General provisions, noise and local air quality*; and
- c) monitor the developments and, when necessary, engage regulatory mechanisms to ensure that the necessary policies are in place before supersonic operations become routine.

RECOMMENDATION 5.5/2 - COMMERCIAL SPACE TRANSPORT (CST)

In recognizing the issues related to commercial space transport (CST) operations potentially affecting international civil aviation, including the safe accommodation of CST operations in airspace and the joint use of aerodromes and other aviation infrastructure:

That States:

- a) and industry support ICAO activities in the CST field through the sharing of relevant expertise;
- b) share guidance material, best practices and national provisions related to commercial space operations through controlled airspace, including risk models and the application of relevant safety management principles.

That ICAO:

- c) coordinate its work related to CST operations with the United Nations Office for Outer Space Affairs; and
- d) establish a means to facilitate the sharing of information as applicable to the interaction between aviation and commercial space transport.

RECOMMENDATION 5.5/3 - STANDARD-MAKING PROCESSES

ICAO should review and enhance its Standard-making processes in order to meet the requirements of the rapid pace of technological developments.

Agenda Item 6:**RECOMMENDATION 6.1/1 - DRAFT 2020-2022 EDITION OF THE GLOBAL AVIATION SAFETY PLAN (DOC 10004, GASP)**

That States:

- a) agree in principle with the draft 2020-2022 edition of the *Global Aviation Safety Plan* (GASP, Doc 10004), with the inclusion of GASP goals and targets; and

That ICAO:

- b) take into consideration input from the Conference, the questionnaire and the future work of the GASP Study Group for subsequent endorsement of the 2020-2022 edition of the GASP at the 40th Session of the ICAO Assembly.

RECOMMENDATION 6.1.3/1 - THE GLOBAL AVIATION SAFETY OVERSIGHT SYSTEM (GASOS)

That States:

- a) support the development of a global aviation safety oversight system (GASOS).

That ICAO:

- b) continue developing an ICAO GASOS comprised of voluntary and standardized competency assessments of safety oversight organizations for recognition of safety oversight functions provided to States, including its legal framework and assessment mechanisms while ensuring those States maintain their obligations and responsibilities under the *Convention on International Civil Aviation* (Doc 7300);
- c) develop appropriate guidance for States to support the delegation of safety oversight functions and monitoring of safety oversight organizations accepting delegations;
- d) design adequate interfaces between GASOS and other ICAO programmes and to avoid duplication of activities between GASOS and the Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP CMA);
- e) present GASOS for endorsement at the 40th Session of the ICAO Assembly if the liability, governance and cost-benefit analysis issues and other concerns raised by the Committee have been addressed; and
- f) encourage safety oversight organizations, including regional safety oversight organizations (RSOOs), State civil aviation authorities (CAAs) and other regional State-based mechanisms, to participate in GASOS in order to expand and enhance the safety oversight support provided to States.

RECOMMENDATION 6.2/1 - SUPPORTING EFFECTIVE SAFETY MANAGEMENT IMPLEMENTATION

That States and international organizations:

- a) identify focal points for the submission of practical examples and tools to be reviewed, validated and posted on the ICAO safety management implementation (SMI) website as a means of sharing successful experiences with the aviation community;
- b) support the ICAO SMI website by providing practical examples of their respective safety management practices, methodologies and tools for the purpose of sharing with other Member States.

That ICAO:

- c) commit to the ongoing development, promotion and maintenance of the safety management implementation (SMI) website in order to ensure active use of the tool and relevance of content to the aviation community;
- d) devise strategies to support the submission and validation of practical examples for the SMI website in the six ICAO working languages (English, Arabic, Chinese, French, Spanish, and Russian) and ensure the translation of the content posted on the website into the six ICAO working languages;
- e) develop initiatives tailored to each region with inputs from the regional aviation safety groups (RASGs) in support of the goals and targets of the Global Aviation Safety Plan (GASP) and Global Air Navigation Plan (GANP) with a focus on the effective implementation of State safety programmes (SSPs) and safety management systems (SMSs) at the State and service provider levels, respectively, including the development of the required safety management competencies and/or the delegation to States, regional safety oversight organizations (RSOOs) and regional accident and incident investigation organizations (RAIOs);
- f) further support the development of appropriate harmonized safety performance indicators (SPIs) at the regional, State and service provider levels and explore the development of means to monitor the effectiveness of SSP and SMS on a more real-time basis;
- g) in collaboration with States, RSOOs and industry explore more powerful methods of identifying hazards and managing risk, suitable for complex socio-technical systems such as aviation and adaptable, regardless of the type of risk;
- h) in collaboration with States, RSOOs and industry explore the benefits of a unified framework for integrated risk management (safety, security, environment, etc...) taking into account the evolution of ISO management standards; and
- i) update, for adoption by the 40th Session of the ICAO Assembly, Assembly Resolutions related to safety management to reflect Amendment 1 to Annex 19 — *Safety Management*, as well as Amendment 15 to Annex 13 — *Aircraft Accident and Incident Investigation*, with consideration given to an overarching safety management Assembly Resolution to complement Assembly Resolution A39-12, Appendices A and B, related to the Global Aviation Safety Plan (GASP) and Global Air Navigation Plan (GANP) in order to focus the attention of States on key aspects of achieving effective SSP implementation.

RECOMMENDATION 6.2.1/1 - STATE SAFETY PROGRAMMES (SSPS)

That States:

- a) identify and address the need to build capacity at the State level for the management of change; and
- b) share their experiences in civil-military cooperation for State safety programmes (SSPs) implementation in conferences, meetings and/or on the safety management implementation (SMI) website.

That ICAO:

- c) review the acceptable level of safety performance (ALoSP) concept taking into consideration the experience of States;
- d) review the need for additional guidance on the management of change at the State level; and
- e) ensure that appropriate emphasis is placed on safety management in the update of Appendix I, Coordination and cooperation of civil and military air traffic, of Assembly Resolution A38/12, *Consolidated Statement of continuing ICAO policies and associated practices related specifically to air navigation*.

RECOMMENDATION 6.2.3/1 - DEVELOPING SAFETY INTELLIGENCE

That States and international organizations:

- a) collaborate for the development of trust sharing networks and adhere to the protective provisions as provided in Amendment 1 to Annex 19 - Safety Management; and

That ICAO:

- b) support States with right-to-know laws in addressing the provisions for the protection of safety data, safety information and related sources in Amendment 1 to Annex 19.

RECOMMENDATION 6.3/1 - UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME (USOAP) CONTINUOUS MONITORING APPROACH (CMA)

That States:

- a) continue to engage fully in the Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA);
- b) complete their self-assessments of the USOAP Protocol Questions (PQs) in a detailed and reliable manner and keep them up-to-date as needed;
- c) enhance cooperation and sharing of experiences in the implementation of USOAP CMA, in particular at regional level.

That ICAO:

- d) continue to evolve the USOAP CMA methodology, processes and tools;

- e) as a matter of priority, implement the recommendations and observations of the Group of Experts for USOAP CMA Structured Review (GEUSR) and, in particular, make available to States the set of indicators forming part of the State safety risk profile;
- f) ensure that pertinent information is not lost when reducing the total number of USOAP CMA PQs, especially with respect to PQs not directly related to safety oversight, which should be included in the appropriate ICAO audit mechanism;
- g) implement as a matter of priority the GEUSR recommendations regarding the structured revision of the PQs (Group A recommendations) and the identification of ‘Priority PQs’ (Group B recommendations);
- h) ensure the continuous monitoring of the States remains robust, relevant and up-to-date; and
- i) establish a study group before the 40th Session of the ICAO Assembly for the further evolution of the USOAP CMA, beyond the GEUSR recommendations, to address means to avoid duplication of efforts and find synergies to enhance the efficiency of the USOAP CMA while maintaining safeguards to guarantee the independence, universality, standardization and global acceptance in the implementation of the programme.

Agenda Item 7:

RECOMMENDATION 7.1/1 - DATA-DRIVEN DECISION-MAKING

That States:

- a) implement data-driven decision-making processes, taking into account the ICAO safety and air navigation indicators, within their safety and air navigation activities and to build data analysis capacity;
- b) consider using ICAO’s air navigation analysis solutions, especially during the initial development of their State safety programmes (SSPs), and joining the ICAO Safety Information Monitoring System (SIMS) project to better utilize their stored data;
- c) exchange safety and air navigation information with other Member States through data analysis tools such as SIMS in support of safety risk management;
- d) continue joint development of safety risk assessment models that support and enable baseline risk quantification, safety risk assessment and forecasting to support risk-based decision making, accident and incident modeling, barrier analysis, sensitivity, and “what if?” analyses to ensure that primary safety considerations are addressed within the integrated safety risk assessment models;
- e) together with industry stakeholders, support regional mechanisms and platforms for greater data sharing and alignment of safety priorities.

That ICAO:

- f) further develop and promote iSTARS and SIMS and other analysis solutions, and conduct regular iSTARS User Group Meetings so as to continually adapt to the changing safety environment;
- g) encourage activities that facilitate global reporting of safety events and vulnerabilities to assure that the necessary safety data is available;

- h) review and develop guidance to further facilitate the sharing of safety data between operators and those responsible for the type design and manufacture of aircraft;
- i) raise awareness in States on the importance of initiating SSP and SMS implementation with simple processes that optimize resources to demonstrate benefits and develop momentum required to achieve the needed change in the organizational culture;
- j) take action to foster the creation of uniform processes in States that promote the sharing of safety data;
- k) encourage States to use the ICAO Safety Management Implementation website as an information sharing platform to facilitate the exchange of experience in regional data sharing among regional groups; and
- l) support regional mechanisms and platforms that enable States and industry stakeholders to share and align safety priorities in support of the RASGs.

RECOMMENDATION 7.1/2 - STANDARDIZED RISK-BASED DECISION MAKING POLICIES AND BEST PRACTICES FOR VALIDATION OF FOREIGN PRODUCTS

That States:

- a) support ICAO's work, through the appropriate group of experts to determine the need for developing new materials to support further reduction in duplicated certification activity, by conducting a feasibility study for developing common standards and recommended best practices for recognizing the capabilities of SoD certification systems (including design approvals/design organization recognition);
- b) support the development of ICAO Standards and Recommended Practices (SARPs), guidance material and manuals that Member States use to issue certificates for products, and complement them with guidance for best practices in conducting validation activities.

That ICAO:

- c) continue to encourage the reduction of duplicate certification action conducted by Member States that offers no commensurate increase in safety; and
- d) review and develop materials for inclusion in the *Airworthiness Manual* (Doc 9760), *Safety Management Manual (SMM)* (Doc 9859), Annex 8 - *Airworthiness of Aircraft*, and/or Annex 19 - *Safety Management*, for States of Registry (SoR) to determine the appropriate level of involvement in validation/recognition principles for States of Design (SoD) approvals.

RECOMMENDATION 7.2/1 – STRENGTHENING RSOOS

That States:

- a) further support the strengthening of regional safety oversight organizations (RSOOs) by engaging actively in the development of their RSOO, by securing adequate and sustainable RSOO funding mechanisms, and, as appropriate, by further delegating safety oversight functions to the RSOO.

That ICAO:

- b) recognize that RSOOs have an important role to play in carrying out safety oversight functions on behalf of their Member States and, within the Global Aviation Safety Plan (GASP) framework, in addressing safety issues at the regional level;
- c) support better alignment and harmonization between PIRGs and RASGs while maintaining the safety framework of the RASGs through consultation with Member States;
- d) further support the strengthening of RSOOs and their recognition within the ICAO safety system by facilitating access to technical support, facilitating the sharing of experience and knowledge between RSOOs through the RSOO Cooperative Platform, establishing the proposed Global Aviation Safety Oversight System (GASOS) and by reinforcing direct cooperation between ICAO and RSOOs in the framework of the GASP; and

That RSOOs:

- e) continue to engage in the RSOO Cooperative Platform and engage actively in the establishment of the proposed GASOS by supporting its implementation and, where applicable, by taking steps towards recognition and in strengthening their safety oversight capabilities.

RECOMMENDATION 7.2/2 - ICAO RUNWAY SAFETY PROGRAMME - GLOBAL RUNWAY SAFETY ACTION PLAN

That States:

- a) recognise that runway safety-related accident categories, particularly runway excursions and incursions, continue to be a global safety priority for aviation stakeholders as determined by a risk-based analysis;
- b) urge runway safety stakeholders, including aircraft operators, air navigation service providers, aerodrome operators, aerospace industry, and regional aviation safety groups, to implement the actions in the GRSAP to reduce the global rate of runway excursions and runway incursions;
- c) continue to establish requirements and activities aimed at improving runway safety through State runway safety programmes;
- d) encourage aerodrome operators to establish effective runway safety teams and encourage all runway safety stakeholders to actively participate in established runway safety teams; and

That ICAO:

- e) continue to lead and coordinate the runway safety programme with its partner organizations to work together to mitigate runway safety-related risks.

RECOMMENDATION 7.3/1 – ICAO IMPLEMENTATION STRATEGIES

That ICAO:

- a) strengthen the linkage between the Global Air Navigation Plan (GANP), the Global Aviation Safety Plan (GASP) and the Global Aviation Security Plan (GASeP) to achieve an integrated implementation approach;
- b) take into account implementation support needs when developing provisions;

- c) further improve the planning and implementation regional group (PIRG) and regional aviation safety group (RASG) mechanisms to enhance the coordination and alignment of implementation between regions;
- d) consider the development of a global collaboration mechanism to facilitate interregional alignment, harmonization, and sharing of best practices and lessons learned;
- e) support the development of a flexible, progressive and risk-based strategy to improve global implementation of Standards and Recommended Practices (SARPs);
- f) request an appropriate group of experts to further review and explore a process that would facilitate short-term (successive) aircraft interchange operations; and
- g) further develop risk management capabilities and facilitate implementation of multilateral arrangements for the sharing of risk information and (regional) contingency planning related with civil aircraft operations over or near conflict zones.

RECOMMENDATION 7.3/2 - AVIATION SAFETY IMPLEMENTATION ASSISTANCE PARTNERSHIP (ASIAP)

That ICAO:

- a) continue to develop the prioritization of States and areas of technical assistance criteria in order to achieve appropriate and transparent prioritization;

That ASIAP Partners:

- b) strive for greater commitment to, and participation in, the Aviation Safety Implementation Assistance Partnership (ASIAP) Programme, and invite other States and international organisations that can provide technical assistance to States to join ASIAP;
- c) and other stakeholders providing technical assistance (including States, regional safety oversight organisations (RSOOs), international organisations, industry and financial institutions) coordinate their technical assistance activities and make use of the online Project Database (<https://www.icao.int/safety/ASIAP/Pages/Tools.aspx>) in order to reduce duplication of activities and effort;
- d) apply the Project Outcome Indicators (POIs) to their projects and review the measurable results in coordination with each other; and
- e) including ICAO, States, international organizations, industry and financial institutions provide funding to support technical assistance activities.

RECOMMENDATION 7.3/3 - STATE NATIONAL PLANNING FRAMEWORK

That States:

- a) reaffirm support for the fundamental roles and responsibilities of Contracting States, Council and the Air Navigation Commission, as provided in the *Convention on International Civil Aviation* (Doc 7300), for the development of quality and timely Standards and Recommended Practices (SARPs);

- b) enhance their involvement in all stages of the provision development process and encourage RSOOs and other aviation stakeholders to do the same;
- c) support the ICAO Next Generation of Aviation Professionals (NGAP) Programme in light of the international need to address the existing aviation personnel shortages and to ensure a competent workforce capable of meeting the needs and challenges of the global aviation community into the future; and
- d) share best practices on applied strategies to promote more productive recruitment, training and education, development and retention programmes.

RECOMMENDATION 7.3/4 – REGIONAL OFFICE RESOURCES FOR IMPLEMENTATION ACTIVITIES

That ICAO:

- a) give due consideration in the allocation of resources to regional offices for the support of implementation activities; and
- b) support the Asia Pacific (APAC) Region in the implementation of Beijing Declaration and progress towards ICAO global targets.

RECOMMENDATION 7.3/5 - SUPPORT FOR THE CONTINUATION OF THE COMPREHENSIVE REGIONAL IMPLEMENTATION PLAN FOR AVIATION SAFETY IN AFRICA (AFI PLAN)

That States:

- a) support the continuation of AFI Plan activities and the project-based approach;
- b) request ICAO, international organizations and industry partners to support the AFI Plan and its associated projects;
- c) consider adopting an approach similar to the AFI Plan to address safety deficiencies and challenges in their region; and

That ICAO:

- d) extend the AFI Plan in order to enable it to accomplish its objectives

Agenda Item 8:**RECOMMENDATION 8.1/1 - MEASURES TO PROACTIVELY ADDRESS EMERGING ISSUES**

That ICAO:

- a) raise awareness and inform States of existing guidance on identifying and addressing emerging safety issues, including mitigation actions and balancing the integrated management of distinct risks (existing/emerging);
- b) urge the regional aviation safety groups (RASGs) or other regional organizations, including regional safety oversight organizations (RSOOs), to institute a process for addressing emerging safety issues based on a data-driven analysis;
- c) urge States, regional entities and industry to participate actively in regional and sub-regional studies on emerging safety issues conducted by the RASGs;
- d) urge States, regional entities and industry to share information on emerging safety issues with other States and ICAO through the dedicated website;
- e) systematically collect information from States and regional organizations, for the purpose of assessing and monitoring their global safety impact, on the following: new concepts of operations and new technologies; new risk management concepts and methods coping with the dynamics and complexity of the aviation system; as well as the initial implementation of such new concepts, methods and technologies;
- f) establish a holistic, performance-based process for the development of ICAO provisions in response to these emerging issues and risks to assess if the established provisions achieve the objectives for which they were designed;
- g) provide guidance for the implementation of risk and performance-based assessment and oversight at both State and regional levels;
- h) provide a global, inclusive civil-military cooperation mechanism to move from a reactive situation to a proactive one by applying predictive, holistic risk management to emerging issues; and
- i) based on data from regional aviation safety groups, develop a study on the subject of objects falling from aeroplanes and guidance material on preventive measures.

RECOMMENDATION 8.2/1 - REMOTELY PILOTED AIRCRAFT SYSTEMS (RPAS) OPERATIONS

That ICAO continue developing Standards and Recommended Practices (SARPs), Procedures for Air Navigation Services (PANS) and guidance material to support safe remotely piloted aircraft systems (RPAS) operations, and continue facilitating implementation of RPAS-related provisions through regional training activities.

RECOMMENDATION 8.2/2 - MEDICAL STANDARD FOR PILOTS OF LIGHT AIRCRAFT

That ICAO:

- a) review national medical certification protocols currently used by a number of States in order to identify commonalities; and
- b) based on this review of commonalities among the various States' national medical certification protocols, develop a Standard specifically addressing pilots flying light aircraft.

Agenda Item 3: Plan of activities of the ICAO SAM Regional Office 2020-2022

3.1 Under this agenda item, the following papers were presented:

- IP/03 – *Draft ICAO Business Plan for 2020-2021-2022* (presented by the Secretariat).
- Presentation on the ICAO Business Plan – 2020-2022 (presented by the Secretariat)

3.2 The Meeting took note of the presentation and the information paper dealing with the ICAO Business Plan – 2020-2022 and the activities related to the South American Regional Office.

3.3 In this regard, the States took note of the main results obtained by the SAM Regional Office with respect to the ICAO strategic objectives during the last triennium, and of the goals that the SAM Office intended to attain during the 2020-2022 triennium.

3.4 The Meeting was also informed that the ICAO Business Plan for the period 2020-2022 applied a result-based management approach and had the same structure as the current Business Plan, based on the vision, mission and the five (5) strategic objectives. The ICAO Business Plan integrates strategy, resources, processes and measurements with a view to improving decision-making, transparency and accountability. The Meeting also noted that the Business Plan, in seeking greater benefits for member States and the civil aviation system worldwide, addressed existing challenges to global aviation management, but also contemplated emerging challenges in aviation.

Agenda Item 4: Other matters

4.1 Under this agenda item, the following working papers were presented:

- WP/07 – *Development of a project for the implementation of One-Stop Security (OSS) among all interested States* (presented by the Secretariat)
- WP/08 – *Progress in USOAP CMA activities* (presented by the Secretariat)
- WP/09 – *Implementation of the State Safety Programme (SSO) in the South American Region* (presented by the Secretariat)

Development of a project for the implementation of One-Stop Security (OSS) among all interested States

4.2 The Meeting reviewed the proposal of a project for the implementation of one-stop security (OSS) in the Region, developed by the ICAO/LACAC AVSEC/FAL Regional Group.

4.3 The strategy of this important initiative was based on a first phase in which the AVSEC measures of all the States would be improved uniformly, followed by the recognition process. Accordingly, and pursuant to Conclusion RAAC/15-5 *OSS implementation*, which urged authorities to continue striving to implement OSS as a useful and necessary tool for improving connectivity, the status of implementation would be presented at the AVSEC/FAL/RG/9 meeting. The Meeting noted that a legal expert and an AVSEC expert had been working on a proposal of agreement for consistent implementation of OSS by the States of the Region, to be reviewed by the legal experts of the States.

4.4 The Meeting felt that regional implementation of OSS was required, *inter alia*, to:

- reduce connecting times;
- reduce security control costs (for example, on equipment, security personnel, etc.);
- increase facilitation for passengers, the airport, other operators, and aircraft operators
- improve security sustainability;
- enhance passenger satisfaction as a result of a better travel experience;
- improve security and facilitation of air transport and aircraft operations; and
- update security regulations.

4.5 In this regard, it approved the revision of Conclusion RAAC/15-5 as follows, with the reservation expressed by Venezuela, which noted that it needed more time and analysis before supporting the initiative, and would inform its decision in due course.

Conclusion RAAC 16/05		FOLLOW-UP TO OSS IMPLEMENTATION	
That:		Expected impact:	
<ul style="list-style-type: none"> a) South American States be urged to support OSS implementation in their States to facilitate passenger flow at their airports and improve connectivity among the States of the Region; b) The Secretariat <ul style="list-style-type: none"> i. coordinate with the Secretariat of the Latin American Civil Aviation Commission (LACAC) for GEPEJTA to review the draft agreement among States for the implementation of OSS and of the recommendations, for its signature; and ii. coordinate the development of a project within the AVSEC/FAL/RG, applying acceptable methodologies that include: <ul style="list-style-type: none"> a. the drafting of standard AVSEC regulations (LAR) b. best practices for OSS implementation among States. 		<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Political / global <input checked="" type="checkbox"/> Interregional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical / operational 	
Why: To finalise the implementation of Procedures for the implementation of one-stop security (OSS).			
When: Before 2035		Status: Approved by the RAAC/16 meeting	
Who: <input type="checkbox"/> Coordinators <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO Secretariat <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Others:			

Progress made in USOAP CMA activities

4.6 The Meeting took note of the establishment of a SAM working group to support States in the conduction of ICAO USOAP CMA activities. The objective of this group was to follow-up on the action taken for gradual improvement of EI and on USOAP CMA activities agreed by States in the MOU.

4.7 Upon reviewing the information presented, it was noted that the SSP PQs would not be taken into account for calculating effective implementation (EI). The Meeting also felt the need to create a reference library containing examples of evidence as guidance for States that so required. In this regard, the Meeting informed that Chile had offered a tool in Google Drive, similar to the corrective action plan (CAP) template, so that States could review priority PQs corresponding to critical element 6 (CE-6).

4.8 Subsequently the Meeting felt that, although the idea of having a bank of evidence was good, it should only be considered as an example, since each State had its own peculiarities.

4.9 After the discussion of the WP, the Meeting agreed on the following conclusion:

CONCLUSION RAAC 16/06		APPROVAL OF THE CREATION OF THE SAM STATES' WORKING GROUP TO SUPPORT STATES IN THE DEVELOPMENT OF ICAO USOAP CMA ACTIVITIES	
That: a) The creation of the SAM States' working group is approved to support States in the development of USOAP CMA activities; the objective of this group is to follow-up on the action taken for gradual improvement of EI and on USOAP CMA activities agreed by States in the Memorandum of Understanding (MOU) subscribed with ICAO. b) The activities developed by the working group are supported in order to assist States in the compliance of the objective and the goals established in the safety axis related with gradual improvement of EI.		Impacto esperado: <input type="checkbox"/> Political / global <input type="checkbox"/> Interregional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical / operational	
Why: To comply with the objective and goals established in the safety axis.			
When: Until 2030		Status: Approved in RAAC/16	
Who: <input checked="" type="checkbox"/> Coordinators <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO Secretariat <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Others:			

Implementation of the State Safety Programme (SSO) in the South American Region

4.10 Subsequently, a working paper was presented on the implementation of the State Safety Programme (SSP) in the South American Region, explaining the efforts made and obstacles encountered for said implementation.

4.11 In this regard, the Meeting requested a more in-depth analysis of the root cause of the obstacles encountered, based on which the Secretariat could review the proposed recommendations.

4.12 Subsequently, a representative of Brazil offered the support of CENIPA for the implementation of the ADREP/ECCAIRS platform in those States that had not yet implemented such systems.

4.13 Finally, the Meeting congratulate the work being developed by Chile and Venezuela in the establishment and implementation of the safety data collection and processing system (SDCPS), which implementation if essential for SSP implementation.