



Tenth Regional Aviation Safety Group — Pan America Plenary Meeting (RASG-PA/10)
Quito, Ecuador, 20-21 June 2019

Agenda Item 3: Operational Safety Risks

3.4 NACC & SAM Risk mitigation activities

STRATEGY FOR THE STRENGTHEN OF AIG EFFECTIVE IMPLEMENTATION IN SAM

(Presented by Secretariat)

EXECUTIVE SUMMARY	
<p>AIG effective implementation in SAM is 69.57%, making it the audit area with the lowest EI percentage in the region. 7 out of 13 SAM States have an EI below 80%. In order to improve AIG EI percentage in the region, the ICAO South American Office developed a Strategy for the strengthen of AIG effective implementation.</p>	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> • Safety
<i>References:</i>	<ul style="list-style-type: none"> • Annex 13 • Annex 19 • Doc 9756 • Doc 9735 • Doc 9859 • Cir 298

1. Introduction

1.1 Bogota Declaration targeted for an 80% effective implementation in the SAM region by 2016. Even though SAM has now reached that target, AIG remains the audit area with the lowest EI score with 69.57%. To improve this percentage of effective implementation, the ICAO South American Office developed a Strategy for the strengthen of AIG effective implementation

2. Description of the strategy

2.1 The goal of the Strategy for the strengthen of AIG effective implementation in SAM is for all its member States to reach at least 60% EI and a regional average of 80% EI by the end of 2023.

2.2 Specific objectives of the strategy are as follows:

- a) Increase AIG EI in SAM;

- b) Increase collaboration at the regional level on AIG;
- c) Integration of AIG activities contained in the strategy with the SAM SPP implementation program; and
- d) Development of a qualification programme for accident investigators in line with ICAO's Cir 298 and customised to SAM region specific needs.

2.3 The Strategy for the strengthen of AIG effective implementation in SAM it has been planned for a period of 5 years (2019-2013), with the following key points:

- a) Qualification of AIG experts from the Region on the ICAO USOAP AIG Computer Based Training;
- b) Evaluation of current AIG situation of each States below 80% EI;
- c) Development of AIG EI strengthen projects customized for each States;
- d) Integration of AIG activities contained in the strategy with the SAM SPP implementation program; and
- e) Development of a qualification programme for accident investigators in line with ICAO's Cir 298 and customised to SAM region specific needs.

2.4 The Strategy for the strengthen of AIG effective implementation in SAM is included as **Appendix A**.



Regional strategy for the improvement of AIG effective implementation in the SAM Region

1. Objectives

General Objective

Strengthening the capacity of the SAM States to effectively conduct accident and incident investigations, in compliance with the provisions of Annex 13, by improving SARPs effective implementation.

Specific objectives

- a) Increase the AIG effective implementation in the SAM region.
- b) Increase SAM States regional cooperation in matters related to AIG.
- c) Integrate AIG activities with the SPP Implementation Plan for the SAM Region.
- d) Develop an accident investigators qualification program in accordance with ICAO Circular 298.

2. Alignment with the GASP and the SAMSP

The specific objectives of effective implementation of this strategy are aligned with the objectives of the Global Safety Plan (GASP) and the SAM Region Safety Plan (SAMSP).

3. Analysis of the current situation

3.1 Effective implementation (EI)

The AIG effective implementation is the lowest in the SAM Region with **69.57%**:

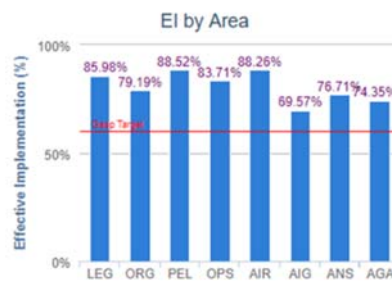


Table B presents, in ascending order, the percentage of effective implementation in AIG of all SAM States.

Table B – SAM States Groups according of their EI

Estado	%EI (DG)	Group
Guyana	15.56	Grup A
Surinam	15.56	
Panama	43	Grup B
Uruguay	60.67	
Peru	62.24	
Colombia	73.33	
Paraguay	79.78	Grup C
Venezuela	87.64	
Bolivia	87.88	
Chile	92.13	Grup D
Brazil	93.33	
Ecuador	95.56	
Argentina	97.75	

2.2 Analysis by Protocol Question (PQ)

The questionnaire corresponding to AIG has a total of 104 Protocol Questions (PQ).

2.2.2 Comparison of Group A States

	EI ¹	Sat ²	Uns ³	NA ⁴	NE ⁵	%UnsC ⁶	%NE C ⁸
Guyana	15.22	14	76	2	12	83%	100%
Surinam	15.22	14	76	2	12	83%	100%

1 – Effective implementation (AIG)

2 – PQ in satisfactory condition

3 – PQs in unsatisfactory condition

4 – PQs in condition Not applicable

5 – PQs in condition Not evaluated

6 – Percentage of PQs in Unsatisfactory condition that coincide in both States

7 – Percentage of PQs in Not evaluated condition that coincide in both States

	Insat	CE1	%	CE2	%	CE3	%	CE4	%	CE5	%	CE6	%	CE7	%	CE8	%
Gayana	76	6	7.9	9	11.8	11	14.5	6	7.9	40	52.6	0	0	0	0	4	5.2
Surinam	76	9	11.8	9	11.8	8	10.5	6	7.9	35	46	0	0	0	0	9	11.8

Guyana and Suriname have 83% coincidence on their unsatisfactory PQs, as well as 100% of coincidence on their Non-evaluated PQs. For this reason, it is efficient and convenient to apply combined support to both States. Additionally, the advantage of geographical proximity between both States is relevant.

2.2.3 Comparison of Group B States

	EI ¹	Sat ²	Uns ³	NA ⁴	NE ⁵
Panama	42.57	43	57	1	3
Uruguay	58.7	54	35	3	12
Peru	60.4	61	37	3	3
Colombia	71.74	66	24	2	12
Paraguay	77.17	71	18	3	12

The distribution of PQs in a Satisfactory, Unsatisfactory, Not Evaluated and Not Applicable condition is much less homogeneous among States.

2.3 Availability of human resources to support States with lower EI

- Experts from the region, especially from Group D States; and
- ARCM

3. Regional strategy for the improvement of AIG effective implementation

3.1 First Phase

Specialists training:

Step 1. – Identify the SAM region AIG specialists, as well as their skill levels.

Step 2. – Promote the AIG specialists training, mainly in the States of Groups A and B, this is fundamental for the development of the following steps.

Step 3. – Identify, specialists from the Group D States, that can support the other States either through face-to-face or remote assistance missions.

Step 4. – Train two specialists from the ICAO-SAM office for an exact interpretation of each question of the USOAP AIG protocol.

Step 5. – Qualify specialists from Group D States in the USOAP AIG CBT, and in the exact interpretation of the AIG protocol questions.

3.2 Second Phase

Diagnosis of Group A and B States:

Paso 6. – Assign specialists to support Guyana and Suriname. The support will be made up of face-to-face missions, diagnosis and follow-up, as well as remote support. The specialists will have to make a detailed diagnosis of each State situation and present a project for the improvement of the AIG EI.

Paso 7. – Assign specialists to support Group B States. Assistance can be remote and / or by face-to-face missions. 1 specialist to support each State (Panama, Uruguay, Peru, Colombia and Paraguay). The specialists will have to make a detailed diagnosis of the situation of each State and present a project for the improvement of the AIG EI.

The ICAO SAM Regional Office will monitor the specialists activities, verify work schedules compliance, and define the corresponding adjustments to the work program to better meet the objectives.

3.2 Third Phase

Improvements implantation and progress evaluation:

Step 8. – Send a customized improvement project the States and a suggestion of implementation schedule.

Step 9. – Assign specialists (remote or face-to-face consultants) to support the activities development.

Step 10. – Periodic progress measurement, based on the proposed schedule and targets.

4. Goals and key performance indicators

Main Goal – All SAM States have an AIG effective implementation equal to or greater than 60% and a regional average of 80% by

December 31, 2023

Specific objective	Meta	Indicadores
Increase AIG effective implementation in the SAM region.	All SAM States have an AIG effective implementation equal to or greater than 60% on December 31, 2023.	<ul style="list-style-type: none"> ➤ SAM State AIG Effective implementation (EI) ➤ % Annual improvement of effective implementation of each SAM State with EI lower than 60% in 2018.
	Average SAM region AIG effective implementation equal to or greater than 80% on December 31, 2023.	<ul style="list-style-type: none"> ➤ SAM AIG Effective implementation (EI) ➤ % annual improvement of SAM AIG effective implementation.
	70% of SAM States have an AIG effective implementation equal to or greater than 80% on December 31, 2023EI.	<ul style="list-style-type: none"> ➤ Percentage of States with EI above 80% in the SAM region
	By 2021, the SAM region will have at least 1 AIG Auditor qualified and licensed by the ICAO USOAP Program.	<ul style="list-style-type: none"> ➤ % effective implementation improvement ➤ Number of AIG auditors in the SAM Region
Increase the SAM States regional cooperation in matters related to AIG.	By 2021, all SAM States will use the ADREP taxonomy and the ECCAIRS platform for the registration and sharing of accidents and incidents that occur in their territory.	<ul style="list-style-type: none"> ➤ Number of States that use the ADREP taxonomy and the ECCAIRS platform for the registration and sharing of accidents and incidents that occur in their territory ➤ Number of SAM States that are sharing information about their accidents and incidents with ICAO, RASG-PA, SRVSOP and ARCM

<p>Integrate the AIG activities with the SPP Implementation Pilot Plan for the SAM Region.</p>	<p>By 2021, all SAM States will use the ECCAIRS platform for the registration and sharing of accidents and incidents that occur in their territory.</p> <p>By 2023, all the AIG Authorities of the SAM Region will share data on accidents and incidents with the Civil Aviation Authority of their State within the framework of the SSP.</p> <p>The SAM Regional office will provide, at least, one ECCAIRS course each year from 2019, until 2023. The course can be provided in virtual or face-to-face mode.</p> <p>By 2021, all SAM States will have personnel trained in the use of the ECCAIRS platform.</p>	<ul style="list-style-type: none"> ➤ Number of States that use the ADREP taxonomy and the ECCAIRS platform for the registration and sharing of accidents and incidents that occur in their territory. ➤ Number of SAM States that are sharing information about their accidents and incidents with ICAO, RASG-PA, SRVSOP and ARCM. ➤ Number of ECCAIRS courses provided by the SAM office to their States. ➤ Number of AIG Authorities of the SAM Region that share data on accidents and incidents with the Civil Aviation Authority of their State in the framework of the SSP.
<p>Develop an accident investigators qualification program in accordance with ICAO Circular 298.</p>	<p>By December 31, 2020, count with a “SAM region accident investigators qualification program” in accordance with ICAO Circular 298.</p> <p>By 2023, all the SAM States AIG training programs harmonized with the “SAM region accident investigators qualification program”:</p> <p style="padding-left: 40px;">2021 - All SAM States will have adequate their initial instruction</p> <p style="padding-left: 40px;">2022 - All SAM States will have adapted their OJT</p> <p style="padding-left: 40px;">2023 - All SAM States will have adequate basic and advanced training.</p> <p>By 2023, all SAM States will have at least one qualified investigator according to the “SAM accident investigators qualification program”.</p>	<ul style="list-style-type: none"> ➤ Existence of a “SAM region accident investigators qualification program”. ➤ Number of SAM States with their AIG training program harmonized with the “SAM region accident investigators qualification program” ➤ Number of SAM States that have, at least, one qualified investigator according to the “SAM region accident investigators qualification program”.
