Agenda Item 5: ICAO regional technical cooperation tools for the implementation of air navigation and safety improvements

REGIONAL TECHNICAL COOPERATION TOOLS FOR SAFETY IMPLEMENTATION

(Presented by the Secretariat)

Summary

This working paper presents to the Thirteenth Meeting of Civil Aviation Authorities of the South American Region (RAAC/13) the achievements of Project RLA/99/901 – Regional Safety Oversight Cooperation System, which is used as a regional technical cooperation tool for safety implementation.

References:
- 95/003 regional project document;
- 99/901 project document; and
- Memorandum of Understanding between LACAC and ICAO.

1. Introduction

Creation of the Regional Safety Oversight Cooperation System (SRVSOP)

1.1 The Regional Safety Oversight Cooperation System (SRVSOP) started its activities in 2002, its origin dating back to the Fifth Meeting of Directors of Civil Aviation of South America (Cuzco, Peru, 1996), in which the participants analysed the possibility of establishing a regional safety oversight mechanism to operate under the direct coordination of ICAO, through the South American Regional Office, initially requesting the International Civil Aviation Organization (ICAO) to study the feasibility of creating a multinational organisation of this nature.

1.2 A group of institutional experts met that same year and concluded that an agreement between civil aviation authorities (CAAs) had to be implemented and signed by each Director of Civil Aviation. It also recommended expanding the scope of the agreement to States outside the South American Region, using the Latin American Civil Aviation Commission (LACAC) forum as depository of State accession agreements.

1.3 To date, twelve (12) States have adhered to the agreement: Argentina, Bolivia, Brazil, Chile, Cuba, Colombia, Ecuador, Panama, Paraguay, Peru, Uruguay, and Venezuela, with LACAC acting as depository, and supplemented with the memorandum of understanding signed between LACAC and ICAO.
1.4 Regional Project RLA/99/901 – Regional Safety Oversight Cooperation Agreement (SRVSOP) is a regional safety oversight organisation (RSOO) aimed at establishing and operating a regional safety system in Latin America with the required technical, logistic, and administrative support. The project, *inter alia*, seeks to further, in accordance with ICAO, the harmonisation and adoption of the Latin American Aeronautical Regulations (LAR) and their associated procedures. It also provides advice to member States regarding compliance with their safety oversight obligations in order to enhance safety levels in the Region using the means available. To date, this project has developed 30 LARs covering the provisions contained in Annexes 1, 2, 6, 7, 8, 14, and 16.

2. **Safety oversight results**

2.1 Within the framework of safety oversight, the SAM Region reached an average effective implementation (EI) of 70%, after Colombia, Ecuador, Suriname, Argentina, and Venezuela received an ICAO coordinated validation mission (ICVM) during the period 2011-2013.

2.2 According to average effective implementation (EI) results by State, seven (7) States (Brazil, Panama, Argentina, Chile, Venezuela, Colombia, and Bolivia) are above the average for the Region, two (2) States (Peru and Ecuador) are very close to reaching the average, and four (4) States (Suriname, Paraguay, Guyana, and Uruguay) are below that average.

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<tr>
<th>Table A-1 – Average effective implementation (EI) by State</th>
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<td>EI by State</td>
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2.3 As a result of the five ICVMs, the average effective implementation (EI) in the SAM Region went from 66.31% to 70.68%, *i.e.*, a 4.37% increase, which represents an average improvement by State of approximately 0.87%.

2.4 In this regard, SAM States improved their EI as follows: Argentina improved by 9.1%, Colombia by 16%, Ecuador by 12.4%, Suriname by 9.6%, and Venezuela by 10.9%.

2.5 In order to improve the overall effective implementation (EI) average of the SAM Region, Peru, Ecuador, Suriname, Paraguay, Guyana, and Uruguay must advance in the resolution of the findings of the latest continuous monitoring approach (CMA) activities of the ICAO Universal safety oversight audit programme (USOAP) or of the last audit cycle based on the comprehensive systems approach (CSA).

2.6 An analysis of the average effective implementation (EI) in South America by audit area shows that the areas of LEG, PEL, OPS, and AIR are above the average for the Region, ORG and AIG are slightly below the average, and ANS and AGA are below the average.
2.7 In order to improve effective implementation in the SAM Region by audit area, special attention must be paid to ANS (53%), AGA (66%), AIG (69%), and ORG (69%) in most States.

Table A-2 – Average effective implementation (EI) by audit area

2.8 Regarding the average effective implementation (EI) by critical element (CE), it has been determined that CEs 1, 2, 5, and 6 are above the average, while CEs 3, 4, 7, and 8 are below the average, where **CE-4 – Technical personnel qualification and training** is the one that needs more improvement. This CE-4 has an EI of 46%.

Table A-3 – Average effective implementation (EI) by critical element

3. Achievements made through the SRVSOP

3.1 In 2002, the SRVSOP started its activities in the areas of personnel licensing (PEL), operations (OPS), and airworthiness (AIR), achieving the following in these areas:

   a) Personnel licensing (PEL):
      – Development and publication of LARs 61, 63, 65, 67, 141, 142, and 147. SRVSOP States are currently harmonising these regulations.
      – Development and publication of manuals for the certification of civil aviation training centres and aviation medical examining centres.
      – Development of advisory circulars (CA) PEL-001, PEL-002, and LAR 67 on acceptable means of compliance (AMC) and interpretative/explanatory material (IEM) for LARs 61, 63, 65, 141, 142, and 147.
      – Training in PEL LARs, certification manuals, and CAs for PEL inspectors and aviation physicians of SRVSOP member States
      – Civil aviation training centre certification trials
      – Development of agreements for the acceptance of multinational certification of civil aviation training centres and aviation medical examining centres
b) **Operations (OPS):**
- Development and publication of LARs 91, 119, 121, 129, and 135. SRVSOP States are currently harmonising these regulations.
- Development and publication of the operations inspector manual (MIO)
- Development and publication of CA 119-001 – Certification of air carriers; 91-020 (CAT II and III) and 10 PBN CAs.
- Training in OPS, MIO LARs and PBN CAs for operation inspectors of SRVSOP member States

c) **Airworthiness (AIR):**
- Development and publication of LARs 21, 39, 43, 45, and 145. SRVSOP States are currently harmonising these regulations.
- Adoption of the following United States CFR Title 14 airworthiness codes: 23, 25, 27, 29, 31, 33, 34, 35, and 36
- Development and publication of the airworthiness inspector manual
- Development of CAs 39-001, 91-001, 135-001, 145.001, 145-002 and 121-001 on acceptable means of compliance (AMC) and interpretative/explanatory material (IEM) on airworthiness of each related regulation
- Training in AIR LARs, the airworthiness inspector manual, and airworthiness inspector CAs of SRVSOP member States
- Approved maintenance organisation (AMOs) certification trials
- Multinational certification of LAN PERÚ and AEROLANE AMOs.

d) **Aerodromes (AGA):**
- Development and publication of LARs 139, 153, and 154. SRVSOP States are currently harmonising these regulations.
- Development and publication of the aerodrome inspector manual (MIAGA)
- Training in AGA LARs, MIAGA for aerodrome inspectors of SRVSOP member States

4. **Project for the implementation of a set of ANS regulations**

4.1 According to Table A-2, the audit area with the lowest effective implementation (EI) is the air navigation services (ANS) area, with 53 % compliance.

4.2 After analysing the results of the ICVMs conducted during the period 2011-2013 to assess the ANS area, and the last audit cycle based on the comprehensive systems approach (CSA), it may be concluded that the main findings in this area are:

a) failure to enact regulations related to ANS Annexes;
b) lack of inspection personnel in all ANS sub-areas;
c) the minimum qualification and experience requirements for ANS personnel have not been established;
d) lack of a training programme for air navigation service inspectors; and
e) proper training in not provided to air navigation service inspectors.
The Second Meeting of the LAR Structure Panel (Lima, Peru, 2-3 March 2009) deemed it advisable to extend the LAR structure to other Annexes of the Chicago Convention and agreed to include the following sets and LARs:

a) Annex 3: Set of MET LARs;
b) Annex 4: Set of AIM LARs: MAP LARs;
c) Annex 10: Set of CNS LARs: COM, NAV, and SUR LARs;
d) Annex 11: Set of ATS LARs: ATS LARs;
e) Annex 12: Set of SAR LARs: SAR LARs;
f) Annex 13: Set of AIG LARs: AIG LARs;
g) Annex 14: Set of AGA LARs: AGA LARs;
h) Annex 15: Set of AIM LARs: AIS LARs; and
i) Annex 18: Set of DG LARs: DG LARs.

The Eleventh Coordination Meeting of SRVSOP Focal Points (RCPF/11) (Lima, Peru, 23-25 October 2013) was presented with the project for the implementation of a set of Latin American Aeronautical Regulations (LARs) for air navigation services (ANS). In this regard, the meeting stressed the need for the SRVSOP to expand its scope to areas in which USOAP audits had identified a low level of compliance, as is the case of ANS, and to seek funding in addition to the annual SRVSOP budget. In this regard, several States offered their support to finance the project for the conduction of ANS activities to enable SAM States and the whole Region to improve the lack of effective implementation (LEI) in the ANS area.

In this regard, the meeting agreed to adopt Conclusion RCPF 11/09 – Implementation of the ANS LARs project, whereby the General Coordinator was requested to consult member States and other organisations as to their interest in participating in the ANS LARs project through the SRVSOP and how much they could contribute to its budget. Likewise, the meeting requested that the results of the consultation be submitted for approval at the JG/26, together with a work plan for the implementation of the ANS LARs project in 2014.

The project for the implementation of a set of Latin American Aeronautical Regulations (LARs) for air navigation services (ANS) contemplates the development of a set of regulations for air navigation services, with guiding manuals for safety inspectors, inspection protocols, training programme, and a group of inspectors in SRVSOP member States who might be part of multinational teams responsible for performing the continuous oversight of air navigation service providers.

According to the project, the ANS LARs will include the following sets: MET LARs (Annex 3); MAP LARs (Annex 4); CNS LARs (Annex 10); ATS LARs (Annex 11, PANS/ATM Doc 4444); SAR LARs (Annex 12) and AIS LARs (Annex 15).

For the drafting of the ANS LARs, the following has been taken into account:

a) Project for the implementation of a set of regulations for air navigation services in the Latin American Region, defining the activities by year (4 years) and its estimated cost (719,000 US dollars);
b) Draft timetable of the ANS LAR project; and

c) Draft budget of the project, in US dollars

The annual maintenance cost of the ANS LARs, to be covered by the SRVSOP, is estimated at USD 120,000.00; this includes the assignment of an ANS specialist for the SRVSOP Technical Committee.
5. **Conclusions**

5.1 According to that stated in paragraph 3, the SRVSOP is a regional technical cooperation tool that contributes to the improvement of effective implementation in the States and in the Region.

5.2 To the extent the States harmonise their regulations and participate in all SRVSOP activities, a more effective implementation and the reduction of aviation accidents and serious incidents will be achieved.

6. **Suggested action**

6.1 The Thirteenth Meeting of Civil Aviation Authorities of the South American Region (RAAC/13) is invited to take note, and comment on, the information contained in this working paper.

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