



Agenda Item 4: RASG-PA Implementation Status and Perspectives on SMS/SSPs

PILOT PROJECT FOR SMS IMPLEMENTATION IN AIRCRAFT MAINTENANCE ORGANIZATIONS OF THE REGIONAL SAFETY OVERSIGHT COOPERATION SYSTEM IN LATIN AMERICA

(Presented by the Secretariat)

SUMMARY

This working paper contains information on the progress attained in the Pilot Project for SMS implementation in LAR 145 aircraft maintenance organizations (AMOs) of the Regional Safety Oversight Cooperation System in Latin American, in relation with Global Strategic Objective (GSI-7) oriented towards the consistent use of the Safety Management Systems (SMS) to be analysed by the Meeting.

References:

- Global Aviation Safety Plan– GASP
- Global Aviation Safety Roadmap – (GASR)
- Report of the Global Aviation Safety Roadmap Workshop (Bogota, Colombia, 19 to 23 May 2008)
- Report of the First Regional Aviation Safety Group – Pan America Meeting (Puntarenas, Costa Rica, 12 to 14 November 2008)

1. Introduction

1.1 ICAO Annex 6 Part I indicates that starting 1 January 2009, States will require, as part of their safety programme, that aircraft maintenance organizations implement a Safety Management System that is acceptable to the State.

1.2 The Regional Safety Oversight Cooperation System (SRVSOP), through the development and harmonization plan of its Latin American Aeronautical Regulation, LAR 145, which refers to the approval of aircrafts maintenance organizations (AMOs), has initiated the implementation of SMS requirements for these organizations through a Pilot Implementation Plan.

1.3 Since 2007, SRVSOP has worked on different activities for SMS implementation in LAR 145 maintenance organizations. Under this context, in 2007 a seminar on SMS implementation for aircraft maintenance organizations was held, with the valuable support of Transport Canada and other notable lecturers from Sky Service Canada, Boeing, Nuclear Science and Technology of the Research and Development Directorate of Brazil, AEROMAN, COOPESA, LAN and ICAO.

1.4 Also within this framework, in 2008 the Regional System General Board approved a *Pilot Plan for the Implementation of SMS on LAR 145 AMOs*. In this same year, a feedback meeting with industry (RRIPEA/01) was held in Lima, Peru, on 8 September 2008, which included the following maintenance organizations: COOPESA (Costa Rica); LAN (Chile), DIGEX (Brazil), SEMAN (Peru), ATSA (Peru), El Peregrino (Peru) and AEROMAN (El Salvador), all of which offered to participate in the Plan. At this meeting, the strategy to implement SMS in LAR 145 AMOs by phases was agreed upon. The RASG-PA/01 Meeting adopted decision RASG-PA/01/2 in support of the pilot implementation plan of SMS on AMOs of the SRVSOP.

1.5 Simultaneously, an SRVSOP Airworthiness Experts Panel initiated version 2 of LAR 145 to include the ICAO SMS framework. This version required that two meetings of the Airworthiness Expert's Panel be held during 2008. As a result of these activities, during the Nineteenth SRVSOP General Board Ordinary Meeting, the Third Edition of LAR 145 was approved as a model of regulations for the implementation of SMS in LAR 145 AMOs and they were to be used in the pilot plan for SMS implementation in OMA's.

1.6 For this purpose, the following AMO's agreed to be part of the implementation pilot project:

- ✓ *AEROMAN (El Salvador)*
- ✓ *ATSA (Peru)*
- ✓ *COOPESA (Costa Rica)*
- ✓ *DIGEX (Brazil)*
- ✓ *LAN (Chile)*
- ✓ *SEMAN (Peru)*
- ✓ *El Peregrino (Peru)*

2. Analysis

2.1 Within this work strategy of the SRVSOP, three principal activities are being considered for implementation of the pilot plan

- Drafting of the harmonized regulation, procedures and support documents
- Training and dissemination
- Joint follow-up of SMS implementation by regulators and industry

Development of activities

2.2 The Third Edition of LAR 145, which includes SMS requirements based on the ICAO framework recently incorporated in Amendment 33 of Annex 6 Part 1, and is the established model regulation to follow for the implementation of this system. Also, this regulation considers SMS implementation to be conducted in 4 phases taking no more than one year each for completion.

2.3 For the implementation of the pilot plan in March 2009, guidance material for the pilot project on implementing SMS in maintenance organizations was prepared. In this guidance material, the organization of the plan is presented in detail. Among required activities, the designation of a representative from the AMO and CAA was established, as well as follow-up through a work plan and teleconferences between all participants every four months.

2.4 In March 2009 a specialist from the SRVSOP developed Advisory Circular 145.002 on Phases 1 and 2 of SMS implementation. Subsequently, in September 2009, a group of specialists made the first revision of this circular, which concluded in CA 145.002. This circular contains the four implementation phases and includes the information obtained during LAR 145 courses provided during 2009, as well as information from the first teleconference of the pilot plan.

2.5 Regarding the Airworthiness Inspector Manual, during 2009 the Second Edition of this manual was reviewed in order to incorporate necessary improvements in the rules and the initial guidelines for the follow-up of Phase 1 of the implementation. Expected completion of this review is November 2009.

Training and dissemination activities

2.6 To elevate inspector competence for evaluating SMS implementation in a maintenance organization and to manage the need of information requests and dissemination to industry, the SRVSOP has organized three courses on the Third Edition of LAR 145.

- Course on LAR 145 and pilot plan (Lima, Peru, May 2009). This course had the support of Transport Canada and included participation from 18 representatives of the CAAs and 10 representatives of the industry.
- Course on LAR 145 and pilot plan (COOPESA R.L. Alajuela, Costa Rica, October 2009). This course included 10 representatives of the CAAs and 8 representatives of the industry.
- Course LAR 145 and LAR 43; (Lima, Peru 2-6 November 2009). This course has been organized at the request of the DGCA Peru to train its personnel and industry representatives.

2.7 In addition, Transport Canada has offered its support for the implementation of the pilot project consisting of advisory, training of inspectors, experience exchange, lessons learned and the identification of opportunities for improvement. Also, an important training opportunity has been presented for airworthiness safety inspectors to acquire additional experience in SMS evaluation.

Joint follow-up of SMS implementation by regulators and industry

2.8 Finally, within the pilot plan follow-up activities, on 7 August 2009, the first teleconference of the pilot plan was held. This activity included the support of AIRBUS, who provided the logistics for holding the teleconference. Twelve persons including government authorities and industry, participated in the teleconference. Information reference Phase 1 progress was exchanged among participants. Concerns regarding the requirements for the implementation of an emergency response plan applied in one maintenance organization were also clarified.

3. Conclusions

3.1 SMS implementation can constitute a challenge for regulators as well as for industry. Phased SMS implementation makes it possible for regulators and industry to make the necessary changes in a timely manner for the operation of their SMS.

3.2 Through joint efforts with industry in SMS implementation, the lessons learned could be incorporated into regulations and guidance material that develop a better understanding of SMS and to facilitate its implementation.

3.3 The pilot programme for SMS implementation, as well as the assistance provided by Transport Canada, is a good example of implementing GASR best practices.

4. Suggested action

- 4.1 The Second Regional Aviation Safety Group – Pan-America (RASG-PA/02) is invited to:
- a) take note of the information presented in this working paper associated with GASR best practices 5a-1, Bp 5a-3, BP 7a-1; and
 - b) continue supporting the pilot implementation plan of SMS for OMAs of the SRVSOP.