



**International Civil Aviation Organization**

ICAO SOUTH AMERICAN REGIONAL OFFICE

**Twelfth Meeting of the Civil Aviation Authorities of the SAM Region  
(RAAC/12)**

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**Revised**

29/9/11

#### **Agenda Item 4: Analysis of the safety oversight level achieved in the SAM Region**

##### **b) Status of the State Safety Programmes (SSP) and Safety Management Systems (SMS) in the States of the Region**

#### **STATUS OF THE SAFETY MANAGEMENT SYSTEMS IN BRAZIL**

(Presented by Brazil)

<b>SUMMARY</b>	
This Working Paper aims at presenting the status of the Safety Management Systems (SMS) in Brazil.	
<b>References:</b> <ul style="list-style-type: none"><li>• Doc. 9859</li><li>• Brazilian Civil Aviation Safety Programme - PSO-BR</li><li>• ANAC Specific Safety Programme - PSOE-ANAC</li><li>• Air Force Command Specific Safety Programme - PSOE-COMAER</li></ul>	
<b>ICAO Strategic Objectives:</b>	<i>A - Safety C - Environmental Protection and Sustainable Development of Air Transport</i>

#### **1. Introduction**

1.1 After studies and consultation with its Member States, the International Civil Aviation Organization (ICAO) has established provisions for safety management in Annexes 1, 6, 8, 11, 13 and 14. Later, the requirements described in Annex 11 were detailed by ICAO in Doc. 4444 - Air Traffic Management, and finally, in 2006, the first edition of the Safety Management Manual – Doc. 9859 (SMM) was published.

1.2 Aiming at the implementation of Safety Management Systems, the Brazilian Administration, through the Air Force Command (COMAER) and the National Civil Aviation Agency (ANAC), approved the Brazilian Civil Aviation Safety Programme - PSO-BR, establishing the safety objectives and policies of the Brazilian State.

1.3 To render clear to all Service Providers the guidelines defined in PSO-BR, and to enable the development of correlated safety actions, Specific Safety Programmes (PSOE) were created for ANAC and COMAER, aligned with the commitments undertaken by the Country in all related International Agreements.

1.4 As a result of this process the Department of Airspace Control (DECEA), responsible for Air Navigation Services in Brazil, passed extremely important legislation for the implementation of SMS at the Air Navigation Service Providers (ANSP). The document entitled Guideline for the Implementation of Safety Management Systems in SISCEAB (DCA 63-3) sets the minimum SMS requirements provided for all service providers. Another document, entitled Plan for the Implementation of Safety Management Systems in DECEA Subordinated Organizations (PCA 63-2), describes the procedures to be adopted for the implementation of SMS.

1.5 In the same direction ANAC has updated its regulation including SMS not only for air operators but also for airport administrators and small civil aviation services providers. The new RBAC (Brazilian Rules of Civil Aviation) 121 and RBAC 135 are harmonized with the current Latin American Regulation - LAR. Both of them entered into force last year and the results are described in the next section.

## **2 Safety Management Systems in Brazil**

### **2.1 COMAER Safety Management Systems**

2.1.1 Annex 11 and Doc. 4444 establish the implementation of Safety Management Systems to the air traffic service providers. DECEA, with a view to rendering this implementation more cohesive and comprehensive, chose to expand the requirements to other providers connected to air traffic services.

2.1.2 Thus, the regulatory frameworks established in the Guideline and in the Implementation Plan had its scope of application extended to all Providers of Air Navigation Services in the Country.

2.1.3 For the purposes of implementing SMS, ANSP is the Organization/Unit/Agency that provides one or more of the services provided by the Brazilian Airspace Control System (SISCEAB), observing DECEA rules and regulations. By convention, in Brazil, such service is known as "Airspace Control", covering the areas of Air Traffic Management (ATM); Aeronautical Information (AIS); Communications, Navigation and Surveillance (CNS), Aeronautical Meteorology (MET); Cartography (CTG) and Search and Rescue (SAR).

2.1.4 Currently, Brazil has more than 460 (four hundred and sixty) Air Navigation Services Providers wherein more than 150 (one hundred and fifty) are providers of Air Traffic Services. So, on this date, all the ANSP have begun implementation of SMS and are at least in the second phase, following the model recommended in Doc. 9859. Of the ANSP directly subordinated to DECEA, 60 (sixty) have completed all phases of the implementation of their SMS and, in December 2011, 95% (ninety five percent) will have completed the fourth phase.

2.1.5 Given the large number of ANSP in the Country, the deadline for the full implementation of SMS was extended to December 2012, date on which all of them will be with the SMS requirements fulfilled.

2.1.6 As part of the strategy for implementation of the SMS at SISCEAB, DECEA has trained more than 200 (two hundred) professionals to act as experts in Safety Management Systems and, to this end, it created 4 (four) SMS specific courses, with emphasis on the SISCEAB area of operations.

2.1.7 These courses are SMS Basic Training for ANSP (ASE 003); SMS Implementation Planning Training in the ANSP (ASE 005), Risk Management and Safety Promotion Training of the ANSP (ASE 006) and Safety Management Systems in SISCEAB (ASE 007), all provided by Organizations of DECEA's own structure.

2.1.8 The ASE 007 course is provided in the form of classroom teaching and lasts 10 (ten) school days. The total workload corresponds to 80 (eighty) hours, of which 25 (twenty five) are directed to the Safety Risk Management focused on SISCEAB, and each class is scaled to a maximum of 20 (twenty) students, for the course to keep a high quality standard.

2.1.9 Finally, as Risk Management is one of the main Safety Management tools, DECEA passed specific legislation (ICA-63-26) which aims at establishing the requirements and responsibilities for the implementation of Safety Risk Management throughout the SISCEAB.

## **2.2 ANAC Safety Management Systems**

2.2.1 ANAC is responsible for the incorporation of ICAO SMS requirements on civil aviation service providers related to Annex 1, Annex 6, Annex 8 and Annex 14. Presently the implementation of ANAC's SMS regulation addresses the requirements for Annex 1, 6 and 14. There are 3,500 aerodromes (150 with scheduled flights), 12,000 airplanes, 23,000 crew members and 1,000 civil aviation companies.

2.2.2 The SMS for aerodromes were introduced in 2003 into the RBHA (Brazilian Regulation of Aeronautical Homologation) 139, leading to the publication of the first Latin American guidance including SMS requirements. The RBHA 139 was updated in May 2009 and became RBAC (Brazilian Rules of Civil Aviation) 139 keeping SMS requirements as part of aerodrome certification process. Using this regulation, ANAC has certified Guarulhos International Airport in second quarter of 2011 as the first as the twenty busiest airport in Brazil.

2.2.3. Continuing its commitment with civil aviation safety ANAC is updating Brazilian regulation to introduce SMS requirements. In July 2009, with the objective of change the safety culture of the civil aviation small services providers, ANAC has published the Resolution 106, that covers flying clubs, small airport operators, law enforcement operators, flying training schools and aerial works operators, including agricultural aviation.

2.2.4 In relation to air operators, the RBAC 121 and 135 were published in 2010 with one year for the operators to present the Safety Management Manual (SMM), including the implementation plan and to be able to demonstrate the completion of the first phase. Once completed this phase in May and August 2011 for 121 and 135 operators, respectively, ANAC is now analyzing their SMS Manuals, as part of the certification process.

2.2.5 In order to ensure the compromise and involvement of air operator's top management to SMS implementation program, ANAC has provided a 2 hours training class leaded by the head of ANAC Safety Department to each Air Carrier CEO and senior management. ANAC has also certified some air operators to train their own staff to be able to follow air operator's SMS requirements.

2.2.6 ANAC has also issued an Air Operators SMS Implementation Guide in order to give the path to develop and implement their SMS program. At the moment ANAC is developing a methodology to classify the SMS requirements for 135 operators accordingly its size and complexity as proposed by ICAO.

2.2.7 To enable civil aviation service providers to comply with SMS implementation, ANAC has tailored the ICAO standard training material harmonizing it with Brazilian requirements. As from 2006 ANAC started the training of civil aviation service providers as well as personnel from Brazilian, Latin-American and Portuguese speaking African Countries CAA. As a result of Resolution 106, published in 2009, ANAC has developed another training program especially for the operators mentioned in 2.2.3 above, concluding more than 20 training classes up to now, with approximately 750 trainees. ANAC has also established a program to train intensively its own staff in order to enhance the surveillance and to become part of internal cultural change process.

2.2.8 Internationally ANAC has joined the Safety Management International Collaboration Group - SM ICG, and is working to support the Safety Management Advisory Group - SMAG responsible for reviewing ICAO Doc. 9859 - Safety Management Manual.

### 3. **Suggested Actions**

3.1 The Meeting is invited to:

- a) Take notice of the information contained in this Working Paper, and
- b) Consider the possibility to take Brazilian experience in the SMS implementation process as one of the methods to be used to comply with SMS ICAO framework.

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