

SAFETY INDICATORS FOR SAFETY OVERSIGHT WITHIN THE BRAZILIAN AIRSPACE CONTROL SYSTEM (SISCEAB)

SUMMARY

This document aims to present the implementation status in Brazil with respect to the safety indicators of the Acceptable Level of Safety (ALoS) for the safety oversight system of Air Navigation Services.

Reference:

- Email of June 6, 2013 (SIXSG Report); and
- Command of Aeronautics Instruction (ICA) 63-22/2013 “Safety Oversight Program of the Air Navigation Service”.

1 Introduction

1.1 In early 2010, the Safety Oversight Program of the Air Navigation Service (ICA 63-22) was developed according to the guidance for the states in the second edition of the Safety Management Manual (SMM) (Doc 9859), as the State Safety Program (SSP) for Air Navigation Service (ANS) in Brazil.

1.2 The Safety Oversight Program of the Air Navigation Service (ICA 63-22) has established an Acceptable Level of Safety (ALoS) and a set of permanent and systematic actions to ensure that Brazilian Air Navigation Services Providers (ANSPs), perform such services, in accordance with the national and international standards, in order to contribute to the maintenance of the ALoS established.

1.3 The Safety Oversight Program of the Air Navigation Service prepared by the Airspace Control Safety Advisory Board (ASOCEA – Assessoria de Segurança Operacional do Controle do Espaço Aéreo) is a dynamic document that is updated whenever necessary, to comply with the national legislation, new operating safety standards established by ICAO and to incorporate indicators adjustments.

1.4 Recently, in January this year, the Program was issued to update the Initial ALoS, adjusting the safety oversight indicators and indicator values and targets.

2 Safety Oversight Management Process

2.1 The safety oversight management process is performed by monitoring the performance of air navigation services, the evolution of the safety indicators and the implementation of actions aimed at achieving the Acceptable Level of Safety.

3 Safety Oversight Indicators

3.1 The safety oversight indicators comprised in the Initial ALoS for Air Navigation Service are:

- a) Number of air traffic incidents, considering every 100,000 (10^5) movements in the airspace under the Brazilian jurisdiction, in the period of one year,
- b) Average percentage of applicable regulatory requirements not complying with the inspections carried out in the ANSPs Class 1 (*1), reflecting the most recent inspection conducted on each provider,
- c) Average percentage of applicable regulatory requirements not complying with the inspections carried out in the ANSPs Class 2 (*2), reflecting the most recent inspection conducted on each provider,
- d) Average percentage of applicable regulatory requirements, not complying with the inspections carried out in the ANSPs Class 1 (*1), with Safety Impact (risk score) equal to or less than 2, reflecting the most recent inspection conducted on each provider, and
- e) Average percentage of applicable regulatory requirements, not complying with the inspections carried out in the ANSPs Class 2 (*2), with Safety Impact (risk score) equal to or less than 2, reflecting the most recent inspection conducted on each provider.

(*1) – ANSPs Class 1: providers located in international aerodromes, training (ANS) schools and medical organizations (air traffic controllers / ATCO health check); and

(*2) – ANSPs Class 2: providers located in national aerodromes.

4 Indicators Values and Targets

4.1 The table below shows the values of the safety oversight indicators, formerly established, as well as the targets for continuous improvement by 2017.

INDICATOR	INDICATOR VALUE IN 2011	TARGET
3.1 (a)	1.04	Reduce to a value equal to or less than 0.94 by 2017
3.1 (b)	5.2	Reduce to a value equal to or less than 3.4 % by 2017
3.1 (c)	14.0	Reduce to a value equal to or less than 7.9 % by 2017
3.1 (d)	0.086	Reduce to a value equal to or less than 0.069 by 2017
3.1 (e)	0.471	Reduce to a value equal to or less than 0.377 by 2017

5 Conclusion

5.1 The safety oversight indicators and the values of such indicators and targets that comprise the Initial Brazilian ALoS for Air Navigation Services, included in the Safety Oversight Program of the Air Navigation Service establish parameters to measure the safety of ANSPs, contributing to higher safety levels of the Air Navigation Services in Brazil.