# ASSEMBLY — 38TH SESSION

#### **TECHNICAL COMMISSION**

Agenda Item 28: Aviation Safety - Standardization

## UNIVERSAL ACCEPTABLE LEVELS OF SAFETY FOR THE SSPs OF ALL STATES

(Presented by the Bolivarian Republic of Venezuela)

#### **EXECUTIVE SUMMARY**

Industry feedback and State interests help shape acceptable levels of safety, the aim being to harmonize the level for all and avoid discretion and subjectivity on the part of States. It is very important for such a development to be standardized in order to maintain a level of safety that is acceptable to all States, for effective implementation of SSPs and in accordance with the GASP objectives.

**Action:** The Assembly is invited to:

- a) take note of the information in this working paper, and;
- b) urge ICAO to take actions necessary to:
  - i) consider the information in this working paper;
  - ii) promote workshops and meetings to develop harmonized safety indicators and common targets for agreement by States in the regions; and
  - iii) design indicators for universal acceptable levels of safety for purposes of the SSP.

Strategic Objectives:	This working paper relates to the Safety Strategic Objective.
Financial implications:	Not applicable.
References:	Safety Management Manual (SMM) (Doc 9859) Global Aviation Safety Plan (GASP) (Doc 10004)

### 1. **INTRODUCTION**

1.1 The provisions of ICAO Standards and Recommended Practices (SARPs) in recent years have recommended the implementation of State Safety Programme (SSP) as a means to establish acceptable levels of safety (ALoS) for each State.

(3 pages)

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<sup>&</sup>lt;sup>1</sup> Spanish version provided by Venezuela.

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- 1.2 Recent revisions of Doc 9859 *Safety Management Manual* have introduced general information to guide States in developing their state safety programmes (SSPs) as well as criteria and guidance for developing ALoS.

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- 1.3 States have been working individually and collectively in their regions, with the support of ICAO regional offices, to provide training on the SSP to government officials and industry professionals.
- 1.4 This paper strongly recommends that ALoS be designed with the leadership of ICAO and contributions from States. These levels of safety should be universal in nature and agreeable to each State. States, organizations and industry should join efforts to standardize the basic safety indicators common to the States in each region, with each State adopting specific indicators according to its needs.

#### 2. **DISCUSSION**

- 2.1 State experiences in implementing the SSP have yielded different approaches to establishing initial safety levels and then targets:
  - a) One starting point is high-consequence events such as serious incidents or accidents. The accident investigation process of the investigative authorities is by definition a reactive method of risk assessment. Some States have very strong institutions with extensive experience in accident investigation that contribute safety data and taxonomies used to describe events. Annex 13 - Aircraft Accident and Incident Investigation, paragraph 8.4, recalls that "A State shall establish and maintain an accident and incident database to facilitate the effective analysis of information on actual or potential safety deficiencies obtained, including that from its incident reporting systems, and to determine any preventive actions required." If a State does not have an SSP in place, its immediate targets would be based on the accident trends of that State. Accident reports and the resulting recommendations can take a long time to produce, making the process of identifying and analyzing causes and subsequently deriving safety indicators a lengthy and inefficient. Another strategy has been to use data and reports from other States and organizations which, though they do not reflect the actual circumstances of the State in question, may nonetheless serve as a reference or starting point.
  - b) High-consequence event databases (serious incidents or accidents) can be analyzed. The development of a serious incident or accident rate is the common denominator of disaster statistics in any industry. To establish the rate, it is first necessary to determine the exact number of flight operations, ground operations, maintenance operations, dispatches, etc. However, this can be difficult since many industry entities do not work with a uniform data collection system. Moreover, the person or organizational unit collecting operational data may serve a function other than safety such as fiscal affairs, finance, tourism or human resources.
  - c) There are presently safety indicators and targets of a general nature. ICAO, through its USOAP programme, has established safety oversight capacity indicators on the basis of its audits, which States can use as a reference for establishing targets in their Corrective Action Plans. Indeed, targets are already established, as indicated in the Resolution A37-4, which "Urges Contracting States, regional safety oversight

organizations and international organizations concerned to work with all stakeholders to implement the GASP objectives and GASR methodology objectives and to implement these methodologies to **reduce the number and rate of aircraft accidents**." The GASP set the following target for the 2008-2011 period: "No single ICAO region shall have an accident rate more than twice the worldwide rate by the end of 2011." Data for the 2013 GASP do show a drop in the rates of LOC-I, CFIT and fatal accidents in 2011-2012 from the previous period. However, fatalities from CFIT accidents show an increase of 30 per cent in respect of all fatalities for 2011 and 2012 (GASP 2013), making that accident category the most fatal for the two year period. All of these data are valuable in measuring accident trends, but this fall in the rates was not part of any value or metric defined under the aforementioned initiatives. It is unclear whether or not the quantitative target was achieved. If States and industry work together, it is possible to develop common safety indicators at the regional level and on that basis establish the targets.

## 3. **CONCLUSION**

- 3.1 SSP implementation requires the on-going participation of States and industry. The experience of Venezuela in this undertaking offers useful insights for interested States, organizations and working groups.
- 3.2 It would be advisable for ICAO to create universal safety indicators in close cooperation with States and regional organizations so as to ensure the sustainable development of air transport and avoid conflicts between States with differing acceptable levels of safety.
- 3.3 Activities should be carried out in each of the regions to support States in building common safety indicators. Such activities would further the initiatives to standardize GASP safety management and help achieve the GASP objectives for SSP implementation.