

## **24th COSCAP SA STEERING COMMITTEE MEETING**

### **Second High-level Safety Conference 2015 (HLSC 2015) Planning for Global Aviation Safety Improvement Achieving SSP Implementation Discussion Paper 6B (DP-6B)**

(Presented by the CTA)

#### **SUMMARY**

This discussion paper discusses the need to facilitate the timely implementation of State Safety Programmes (SSPs) built on the foundation of effective safety oversight systems. SSP requirements are contained in Annex 19 – *Safety Management* and comprise objectives in the Global Aviation Safety Plan (GASP) to lower the risk of accidents using appropriate proactive mitigation strategies. In addition, the paper discusses ICAO’s approach for monitoring and validating suggested SSP implementation strategies as well as related tools for use by States in this context.

## **1. INTRODUCTION**

1.1 The emerging issues discussed at the HLSC 2015 further emphasize the importance of using a proactive approach in identifying hazards and managing safety risks. Safety risks may vary from one State or region to another requiring the development of tailored mitigation strategies, while others are globally applicable to all. Each State needs to understand their particular aviation environment and hazards that may be encountered in order to effectively manage aviation safety risks.

1.2 The Standards and Recommended Practices (SARPs) in Annex 19 – *Safety Management* require that States manage aviation safety risks. Given the increasing complexity of the global air transportation system and the interrelated aviation activities required to assure the safe operation of aircraft, Annex 19 requires continued compliance with State safety oversight requirements as well as the evolution of a proactive strategy to improve safety performance. This proactive safety strategy is based on the implementation of an SSP that systematically addresses safety risks. To provide a solid foundation for the SSP, States should first establish a mature safety oversight system, as required by Annex 19, paragraph 3.2 and outlined in the Global Aviation Safety Plan (GASP), corresponding in average to a Universal Safety Oversight Audit Programme (USOAP) level of effective implementation (EI) above 60 per cent.

1.3 States need to perform an SSP gap analysis and develop a plan to implement an SSP. This will allow them to identify hazards inherent to their aviation environment and subsequently assess and mitigate the associated risks, including risks arising from any changes being introduced.

## **2. MONITORING SSP IMPLEMENTATION PROGRESS**

### **2.1 SSP gap analysis**

2.1.1 As per Chapter 4 of ICAO's Doc 9859, *Safety Management Manual (SMM)*, before developing an SSP implementation plan, a gap analysis of existing State systems and programmes against the ICAO SSP framework and supporting guidance material is needed to assess the existence and maturity of the respective SSP elements.

2.1.2 To assist States in conducting an SSP gap analysis, ICAO has developed an online application, which can be found on SPACE/iSTARS 2.0. All action and implementation-related information entered in the SSP gap analysis tool is treated confidentially and is not disclosed by ICAO. ICAO will periodically collect high-level statistics and produce graphs showing the aggregated information to estimate the level of SSP implementation regionally and globally.

2.1.3 The information provided through gap analyses completed by States using the SPACE/iSTARS 2.0 application will allow ICAO to determine the amount of work required to achieve the implementation of SSP and facilitate the development of effective strategies to assist States at the regional and global levels. Even States with an EI below 60 per cent should complete the gap analysis. As there are some overlaps between the safety oversight system and the SSP, the gap analysis will highlight these to allow the State to make progress toward both goals more effectively.

2.1.4 Users that are already members of the SPACE/iSTARS 2.0 group can access the SSP gap analysis online application through the SPACE catalogue. Other authorized users can request access to the SPACE group and the SSP gap analysis online application through the ICAO secure portal (<http://portal.icao.int/>) or the ICAO public website (<http://www.icao.int/safety/iStars>).

### **2.2 Detailed SSP self-assessment**

2.2.1 After performing an SSP gap analysis, States can use the USOAP continuous monitoring approach (CMA) protocol questions (PQs) to conduct a more detailed self-assessment in preparation for an appropriate USOAP CMA activity. This self-assessment will enable States to evaluate their level of implementation of the ICAO safety management provisions and to submit supporting evidence using the CMA online framework.

2.2.2 ICAO has developed a comprehensive set of safety management PQs based on the provisions of Annex 19. They have been available to States as of the last quarter of 2014 on the USOAP CMA Online Framework, along with the 2014 amendment of the other PQs. While the 2014 amendment of the other PQs applied for USOAP monitoring activities as of 1 January 2015, ICAO will not begin monitoring the new safety management PQs until 1 January 2016.

2.2.3 States with an EI of over 60 per cent will have until the end of 2015 to complete their self-assessments and to submit related evidence through the CMA Online Framework. Starting on 1 January 2016, ICAO will determine the status of the new safety management PQs through appropriate USOAP CMA activities.

### **3. SSP IMPLEMENTATION**

#### **3.1 States with an EI below 60 per cent**

3.1.1 As a prerequisite to SSP implementation, States should establish a mature safety oversight system by first identifying and addressing any deficiencies. The USOAP CMA identifies the deficiencies of the State's safety oversight system and provides States with an analysis of these deficiencies to assist them in developing corrective action plans (CAP). These actions should be prioritized in accordance with the areas of greater risk given the types and levels of aviation activity in the State.

3.1.2 Once a State is actively making progress to address the prioritized actions in its USOAP CAP, an SSP gap analysis, using ICAO's SSP gap analysis tool, should be conducted.

3.1.3 Once a State achieves a rate of effective implementation of its safety oversight system of 60 per cent, it should then proceed with the steps outlined for States with an EI above 60 per cent.

#### **3.2 States with an EI above 60 per cent**

3.2.1 States having achieved a mature safety oversight system should perform an SSP gap analysis using the tool on SPACE/iSTARS 2.0, if they have not done so already. A more detailed self-assessment can then be conducted using the comprehensive USOAP CMA PQs on safety management.

3.2.2 The results of the SSP gap analysis and PQ self-assessment should then be used to plan the remaining tasks required to implement an SSP. The progressive or phased implementation of an SSP effectively manages the associated workload and expectations within a realistic timeframe. The actual sequencing or prioritization of tasks will vary among States. A four-phased approach for the implementation of SSP is provided in the SMM. Another approach would be to develop an action plan similar to that requested after a USOAP activity. In effect, the tasks identified as not completed from the SSP gap analysis can be divided into short (0-3 months), medium (3-18 months) and long-term (18-36 months) actions.

3.2.3 Actions, which are required for the expeditious mitigation of safety risks, should be taken as a matter of priority. Actions which inherently take some time to complete (i.e. amendments to regulations or legislation) should also be initiated as soon as possible in order to have them completed in due time.

3.2.4 Task dependencies should be considered where appropriate. The timeframes indicated for the phases in the SMM or actions outlined above are an approximation only. The actual implementation period will depend on the scope and complexity of the State's aviation system, the actual gaps identified from the gap analysis and the organizational structure in

place. Throughout this process, the State safety assurance function ensures continued implementation of the State safety oversight system.

#### **4. SUPPORT FOR SSP IMPLEMENTATION**

4.1 The ICAO safety management website, <http://www.icao.int/SafetyManagement>, has valuable information, tools and links to resources that support the implementation of Annex 19 and will be updated regularly with new developments. In addition, the third edition of the *Safety Management Manual (SMM)* (Doc 9859), published in May 2013, also includes guidance material for SSP implementation.

4.2 The ICAO safety management training material is also being updated to reflect the latest safety management developments. It is expected to be launched in late 2015 and will use a blended training approach consisting of five computer-based training (CBT) modules and on-site workshops. In addition, ICAO offers an Analysis Workshop to support the development of the skills needed by States and industry to capture and store safety data as well as for manipulating and integrating data to facilitate hazard identification and risk mitigation. Information on the Analysis Workshop can be found on SPACE/iSTARS 2.0.

4.3 The regional aviation safety groups (RASGs) have been invited to identify activities in support of the implementation of safety management and to report on the effective and continuing implementation of SMS and SSP provisions.

#### **5. CONCLUSIONS**

5.1 The GASP has established clear objectives and a strategy to achieve them taking into consideration the level of maturity of a State's safety oversight system. The individual gap analyses performed by States will serve to provide valuable information to ICAO. Using the gap analysis, States can develop implementation plans to allow them to make progress towards the GASP objectives.

5.2 The information collected from the completed gap analyses will be shared with the aviation community on an aggregate level, respecting each State's confidentiality, to support the GASP update process. A summary of the gap analysis reports should be presented to the next Assembly to support any proposed adjustments to the GASP as well as the need for additional implementation assistance or guidance.

#### **6. ACTION FOR THE MEETING:**

The meeting is invited to encourage States to take appropriate measures, based on their Universal Safety Oversight Audit Programme (USOAP) effective implementation (EI), to progress the implementation of SSP by:

- a) Prioritizing and actively progressing the resolution of their USOAP deficiencies;
- b) Performing an SSP gap analysis; and
- c) After achieving an EI of 60 per cent, performing a more detailed SSP self-assessment; and developing an SSP implementation plan.

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