



WORKING PAPER

THIRTEENTH AIR NAVIGATION CONFERENCE

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COMMITTEE B

- Agenda Item 6: Organizational safety issues**
6.1 Strategic plan
6.1.2: Enabling safety performance monitoring; goals, targets and indicators in the 2020-2022 edition of the GASP

RECOMMENDATIONS RELATING TO THE SAFETY OVERSIGHT MARGIN INDICATOR INCLUDED IN THE GLOBAL AVIATION SAFETY PLAN (GASP)

(Presented by the United States)

EXECUTIVE SUMMARY

This paper requests that ICAO remove the use of the safety oversight margin (SOM) as an indicator and/or target in the *Global Aviation Safety Plan* (Doc 10004, GASP), and replace it with an alternate metric.

Action: The Conference is invited to agree to the recommendation in paragraph 2.7.

1. INTRODUCTION

1.1 During the 39th Session of the ICAO Assembly, Resolution A39-12, *ICAO global planning for safety and air navigation* was adopted and the Assembly recognized the importance of a global framework to support the strategic objectives of ICAO. The global aviation safety roadmap, presented in the draft 2020-2022 edition of the *Global Aviation Safety Plan* (Doc 10004, GASP), serves as an action plan to assist the aviation community in achieving the GASP goals.

1.2 The purpose of the GASP is to reduce fatalities, and the risk of fatalities, by guiding the development of a harmonized safety strategy and the implementation of regional and national aviation safety plans. The GASP strives to enhance global civil aviation safety through taking data-driven decisions.

2. DISCUSSION

2.1 The 2020-2022 edition of the GASP, introduces a new metric known as the safety oversight margin (SOM). The SOM is the difference between that State's effective implementation (EI) score of the critical elements of a safety oversight system and the minimum EI score for that State. The minimum EI score is the value produced by a global linear regression of traffic versus EI, applied to the traffic of the State. Essentially, this metric is a traffic-weighted average EI score. The purpose of this new metric is to assess States' safety oversight capabilities. This assessment is intended to assist ICAO and the Regional Aviation Safety Groups (RASGs) in prioritizing their resources.

2.2 The United States fully supports the purpose of the GASP and the development of an additional metric to assist ICAO and the RASGs in prioritizing their resources. At this time, the SOM has several shortcomings as detailed below, which should preclude its use as an indicator in the GASP.

2.3 The concept of a SOM may have the unintended consequence of leading a State with a positive margin to believe it has more oversight than it needs. For example, some States currently have EI scores that are nearly double the target EI scores identified by the SOM tool. Faced with resource constraints, a State with a high positive SOM might reasonably conclude that it should take resources away from aviation safety and apply them somewhere else. This outcome would be in conflict with the goals of the GASP.

2.4 SOM is dependent on traffic volumes. Therefore, a State's margin is likely to change over time even if its oversight capabilities remained the same. A positive change over time does not necessarily indicate a positive change to a State's oversight capabilities. A State could also improve its SOM if traffic volume fell from one period to another without any improvement to its oversight capabilities. Furthermore, SOM scores assume a linear relationship between aviation traffic and oversight requirements, but consensus on this has not been reached.

2.5 The GASP relies on the SOM in three of the 11 targets, which may lead to unintended consequences.

2.5.1 Target 2.2 calls for all States to have positive SOMs. However, as traffic increases, the target a State must reach to achieve a positive safety margin will continue also increase. This continuously shifting goal adds uncertainty to States' planning processes with little discernible benefit.

2.5.2 Target 4.1 calls for States with negative SOMs to request assistance from other States or oversight bodies. Because the SOM is not a reliable indicator of the effectiveness of a State's safety oversight capabilities, this target could lead to States with more capable oversight systems and higher EI scores being expected to request assistance from States with less capable systems and lower EI scores to meet the Target 4.1. This is not an effective allocation of either States' resources.

2.5.3 Target 4.3 calls for States with a positive SOM (and an effective State safety program (SSP)) to actively lead RASGs' safety risk management activities. However, a State can have a low EI score and still have a positive SOM. This target could incentivize a State to seek leadership in activities that it is not capable of leading effectively.

2.6 The United States is concerned that the use of the SOM as presented in the latest draft of the GASP has numerous shortcomings to be an effective means of measuring performance under the GASP. Inclusion of the SOM in its current state will severely undermine the effectiveness of the GASP, as States cannot have confidence in its outputs.

2.7 The United States suggests that ICAO modify the GASP as follows:

- a) remove SOM as a GASP indicator; and
- b) utilize the recommendations of the ICAO Group of Experts for a USOAP CMA Structured Review to utilize a priority protocol question EI score and an implementation EI score, in addition to overall EI score. This combination of scores would provide better visibility of the State's safety oversight system. Using the revised EI score as a base should highlight where regional resources should be focused.

3. **CONCLUSION**

3.1 The Conference is invited to recommend that the ICAO GASP Study Group remove the use of the SOM as an indicator and/or target, and replace it with the alternate metric suggested in paragraph 2.7.

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