

European and North Atlantic Office



DIRECTORS GENERAL OF CIVIL AVIATION - EUR/NAT REGIONS 2019 MEETING (EURNAT-DGCA/2019)

(Paris, France, 19 to 20 March 2019)

Agenda Item 5: ICAO Business Plan and EUR/NAT Operating Plans for 2020-2022, including priorities for the ICAO EUR/NAT Regions

i. Aviation Safety and Air Navigation

SHARING BEST PRACTICES TO IMPROVE SAFETY PERFORMANCE IN ATM

(Presented by CANSO)

SUMMARY

This paper describes the most recent activities by CANSO in the field of Safety and proposes to share it as best industry practices.

1. Introduction

- 1.1 Safety is the aviation industry's, and Civil Air Navigation Services Organization's (CANSO), number one priority.
- 1.2 CANSO believes that improving safety performance is best accomplished when leveraging the best practices and shared expertise of the global safety community. Some clear examples of this are the CANSO Standards of Excellence and Toolboxes that CANSO has developed over the last year, the:
 - a) Revised version of the Standard of Excellence in Safety Management Systems (SoE in SMS);
 - b) Standard of Excellence in Human Performance Management (SoE in HPM);
 - c) Just Culture Toolbox.

2. Standard of Excellence in Safety Management Systems (SoE in SMS)

2.1 The CANSO Standard of Excellence in Safety Management Systems helps ANSPs¹ build, implement and improve their Safety Management Systems (SMS) to suit the size and operational complexity of their organisation, reflect industry best practices and meet international standards.

https://www.canso.org/system/files/CANSO%20Standard%20of%20Excellence%20in%20Safety%20Management%20Systems.pdf

- 2.2 The latest version incorporates recent developments in safety management thinking and practice and aligns with the International Civil Aviation Organization's (ICAO's) Annex on Safety Management (Annex 19).
- 2.3 The CANSO Standard of Excellence in Safety Management Systems provides ANSPs with the tools to:
 - a) Measure and understand SMS maturity against industry standards
 - b) Make a business case for safety improvements
 - c) Build and develop an SMS that meets their requirements and harmonises global safety
 - d) Demonstrate alignment with regulation, including ICAO's Annex 19
 - e) Share key learnings and best practice across the industry
- The SoE in SMS provides a means for ANSP management, and safety managers in particular, to develop a phased plan to enable the step-wise implementation of SMS elements. This approach is based on the experience of CANSO Members. It is aligned to the principles set out in the ICAO Safety Management Manual (Doc 9859) and promoted in ICAO courses on SMS implementation. The figure below demonstrates the SMS maturity levels (A through E) that can be achieved, from the most basic to optimized practices.

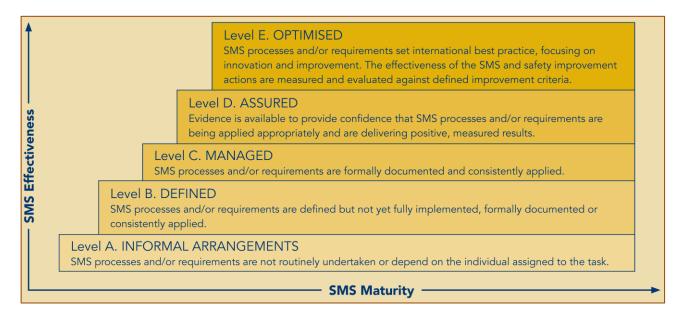


Figure 1. Levels of maturity of the SoE in SMS

- 2.5 CANSO, in collaboration with EUROCONTROL, has elaborated a questionnaire based on the Standard of Excellence in Safety Management Systems Maturity to assess the level maturity of all aspects of the SMS. It covers the main elements of Annex 19 and beyond. It draws on information which is included in the ICAO Safety Management Manual (Doc 9859) and promoted in ICAO courses on SMS implementation.
- 2.6 In order to complement the SoE in SMS, CANSO produced the CANSO Safety Management System Implementation Guide, which aims at providing a comprehensive overview of the steps, methods and techniques that ANSPs can use to implement an effective safety management system (SMS) to the managed maturity level.
- 2.7 The SoE in SMS and the EUROCONTROL/CANSO Questionnaire are the foundations for the CANSO's Standard of Excellence in Air Navigation Services Safety (SEANS-Safety) initiative.

- 2.8 Currently, CANSO member ANSPs are conducting self-assessments of their SMS Maturity levels, using the guidelines in the CANSO SoE in SMS. With the introduction of SEANS-Safety, independent validation of the findings will provide assurance of the actual SMS Maturity level of the member ANSP.
- 2.9 SEANS-Safety provides ANSPs and their regulators with confidence that their SMSs meet ICAO Annex 19 requirements. Additionally, SEANS-Safety allows ANSPs to identify weaknesses in their Safety Management Systems (SMSs) and strive to exceed both ICAO and regulatory requirements.

3. Standard of Excellence in Human Performance Management (SoE in HPM)

- 3.1 Good human performance is required to deliver good air traffic control. At a time when new technology and procedures are being introduced with a greater reliance on automation, a high level of performance from humans in the system has never been so important. To keep the system safe, efficient and effective, adaptation and flexibility is necessary. It is the people in the system that provide this resiliency.
- 3.2 CANSO's Human Performance Management Standard of Excellence provides ANSPs with a means for assessing their current level of maturity with respect to human performance management. It can also be used to identify an organisation's priorities for improvement and the actions that should be undertaken.
- 3.3 The SoE in HPM sets out the requirements against which an ANSP can assess themselves and, where appropriate, define improvement activities to obtain an increased level of maturity for 12 elements. These 12 elements of human performance were identified as a result of reviewing best practice within ATM and across other safety-related industries. These are shown below and are the foundation of a Human Performance Management programme.

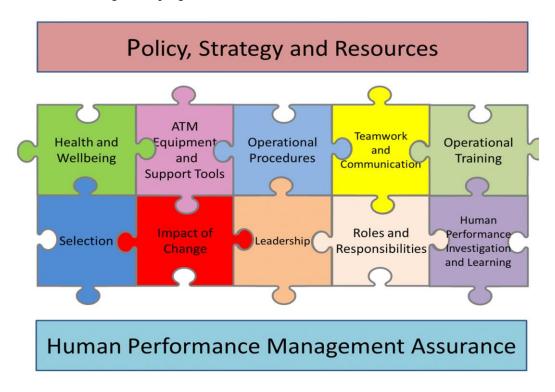


Figure 2. The 12 Elements of the SoE in HPM

3.4 The levels of maturity (from Level A to Level E) in the Human Performance Management Standard of Excellence are the same as those used in CANSO's Safety Management System Standard of Excellence.

- 3.5 Managing the 12 elements of the Human Performance Management programme, commonly owned by different parts of the organisation, may require significant effort and co-ordination. The SoE in HPM is designed in such a way that you can identify key priority elements as a first step and to focus your implementation activities on these elements. The focus is on identifying quick wins that directly benefit the organisation. This will demonstrate value from improving human performance and provides a strong foundation for implementing further actions within your organisation.
- 3.6 As recently stated by the CANSO DG, Jeff Poole, at the 2018 CANSO Safety Conference "The role of the human becomes even more important in the new age, so we must ensure a strong focus on human performance management".

4. Just Culture Toolbox

- 4.1 The single most important part of a good safety culture has been recognised as Just Culture. This is an atmosphere of trust where employees feel naturally inspired to call to attention safety risks, even when they themselves may be implicated in the discovery of that safety risk. However, it is also clear that unacceptable behaviour will not be tolerated. It is this balance that results in the use of the word "Just".
- 4.2 CANSO, in collaboration with its European social partners European Transport Workers' Federation (ETF) and Air Traffic Controllers European Union Coordination (ATCEUC) and the professional associations IFATCA, IFAIMA and IFATSEA, has developed a toolbox setting out best practices on implementing Just Culture across the ATM industry and in the wider community.
- 4.3 The toolbox² contains a set of guiding principles for implementing a Just Culture. While many documents have been written about Just Culture, very few have actually addressed 'how' to achieve one. Achieving a Just Culture in any organisation is complex; it will generally take many years. The toolbox has been developed as a set of guiding principles that are universal and not limited to the aviation domain. Representing different actors of the organisational domain (employers, workers, professional staff organisations), it is believed that this guidance could be very valuable.
- 4.4 The various areas that will be covered in this toolbox are shown pictorially below:



Figure 3. Areas covered in the Just Culture Toolbox

² https://www.canso.org/system/files/Regions_and_Programmes/Just%20Culture%20Toolbox%202018.pdf

5. Action by the Meeting

- 5.1 The EUR/NAT States/EURNAT-DGCA are invited to:
 - a) note the information provided;
 - b) ensure the use of the CANSO Standards of Excellence and Just Culture toolbox in their ANSPs.

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