



Safety Evolution Guide: Safety risk management, SA 7.1 Safety Plans

An Evolution Guide for an SMS practice which has been recognised as Optimised by the CANSO Safety Standing Committee

1. OBJECTIVE OF GUIDE

Members of the Civil Air Navigation Services Organisation (CANSO) are committed to the improvement of their services. As part of this commitment, organisations share their practices in efforts transfer learning across the industry.

This guide captures:

- The practices of an Air Navigation Service Provider (ANSP) in one element of the CANSO Standard of Excellence (SoE) in Safety Management System (SMS).
- The practices of this ANSP have been recognized by their peers as being an optimised practice within the industry (see Figure 1).
- The optimised practices have been selected on the basis of their novelty, innovation or the recognition of their potential to manage operational risks.



2. APPLICATION OF THE GUIDANCE

CANSO recognizes that this guidance will not be relevant to all ANSPs. The maturity of any ANSP’s Safety Management System will be dependent on their specific context. This context will be a reflection of factors including the size and complexity of the organisation, domestic regulations and the risk appetite of the organisation.

ANSPs do not necessarily need to adopt all the practices and processes promoted by CANSO but may consider the relevance of the practices promoted in this guide to their operational environment.

3. OPTIMISED PRACTICE

This guide addresses a SMS process which was identified in 2021 as being optimised, it details how one Air Navigation Service Provider, FerroNATS, is actively identifying and managing latent safety risks. The approach was reviewed by a panel of experts from the Optimised Review Group. The approach meets CANSO’s requirements for SoE in SMS Study Area SA 7.1 (see below).

4. SCOPE OF GUIDE

This guide aims to provide an insight into what FerroNATS has done in terms of designing and implementing the process to identify and manage latent safety risks, so that it reflect work-as-done and takes into account the view of front line personnel.

5. APPLICABLE STANDARDS AND REQUIREMENTS

CANSO Standard of Excellence in Safety Management Systems

7. Safety Risk Management (ICAO Frameworks 2 and 3-1.1)

Objective	Informal Arrangements	Defined	Managed	Assured	Optimised
7.1 Hazards to operations are reported and assessed.	Hazards to operations are not highlighted by either managers or staff. However, risks to operations are recognised.	<p>The organisation is developing processes to assist in the identification and reporting of hazards.</p> <p>The organisation is developing processes to assess the risk that hazards pose to operations.</p> <p>The organisation is developing processes to document the existence of hazards and their risk levels.</p>	<p>The organisation has a sufficient number of qualified employees to assist in identifying and assessing hazards.</p> <p>The organisation has taken reasonable steps to identify all hazards affecting its operations.</p> <p>The organisation's hazard identification process is based on a combination of reactive, proactive and predictive methods of safety data collection.</p> <p>The organisation regularly includes stakeholders in its identification and assessment processes.</p> <p>The organisation addresses identified hazards as part of its process to improve safety performance.</p>	<p>The organisation reviews and updates its hazard identification and analysis processes at least once every five years.</p> <p>The organisation monitors whether the hazard identification process is appropriately applied.</p>	The organisation has set best practice(s) for safety management for this objective and is willing to share those with other ANSPs/organisations.

Extract from CANSO Standard of Excellence in Safety Management Systems

https://canso.fra1.digitaloceanspaces.com/uploads/2021/04/canso_standard_of_excellence_in_safety_management_systems.pdf

6. METHODOLOGY

This Optimised Practice is formally included in FerroNATS' SMS, in the Procedure for the identification, analysis and mitigation of safety risks (SNAE-SGS-MAN-DAM). This procedure is aimed at identifying and managing latent safety risks, as opposed to those deriving from changes to the functional system, which have a dedicated process formalised in the SMS.

The procedure was created to ensure that latent risks were properly identified and mitigated. Without this procedure, risk identification came primarily from safety occurrence investigation or changes to the functional system, but the existence of latent safety risks was not taken into consideration before the development of this procedure.

The procedure has two facets, a corporate one which focuses on the identification and mitigation of safety risks that affect the whole organisation, and a local one which identifies safety risks and mitigation actions in each of the units managed by FerroNATS.

The procedure is as follows:



Annually front-line personnel (ATCOs and ATSEP) of each unit get together for a brainstorming session to **identify latent safety risks** that can affect their unit. The meeting is facilitated by the Unit Manager and the Unit Safety Manager. At a corporate level, the Steering Committee hold a similar session to identify latent safety risks affecting the whole organization.



The Unit Manager and Unit Safety Manager prioritize the identified risks and **define a proposal for the mitigation plan**. At a corporate level, this is agreed between the members of the Steering Committee.



The Unit Manager and Unit Safety Manager present the proposal for the risks and mitigation strategy to top management, who hold **safety accountability** for risk identification (Operations and Technical Directors in their respective areas) and mitigation (Safety Director). The **Unit Safety Plan is formally approved** in the meeting. At a corporate level, the Safety Plan is formally approved by the Director General.



Quarterly, the unit and HQ need to provide evidence for the mitigation actions defined in the Unit Safety Plan and the Corporate Safety Plan. This **evidence is reviewed and approved** by the Safety Director, who determines which is the completion status of each plan.

This process truly ensures that the front-line view is taken into account in the identification of risks: all staff in the units contribute to the identification of latent safety risks. Thus, the process ensures that work-as-done and not work-as-imagined is considered when identifying safety risks. Besides, local knowledge is also taken into account in the definition of the mitigation actions, since the mitigation strategy is defined by the Unit Manager and the Unit Safety Manager. Moreover, this procedure ensures that safety accountability (as defined in the SMS) is adequately discharged, since top management is included in the approval of the identified risks (Director General at a corporate level and Operations and Technical Directors at a unit level) and in the approval of the mitigation strategy and evidence that support the claimed progress (Safety Director).

The frequency of the identification of risks (annually) and the close monitoring of the Safety Plans implementation (evidence is formally reviewed quarterly) are believed to be essential for the successful application of the procedure.

7. SUMMARY

This guide presents an example of how one ANSP has practically implemented a methodology to ensure that latent risks to the operations are identified and mitigated, involving front-line personnel and thus ensuring that work-as-done is considered when managing safety risks.