



Safety Evolution Guide: Safety Pillar Program

Draft example of an Evolution Guide based on a 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 optimized practices have been selected on the basis of their novelty, innovation or the recognition of their potential to manage operational risks.



Given the dynamic nature of safety management, the practices presented in this document may be superseded. CANSO will publish updated best practice guidance.

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 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 2017 as being optimised, it details how one Air Navigation Service Provider, NAV CANADA, improved the communication of safety topics across the company by implementing a primary point of

contact in each unit for matters related to operational safety, known as the Safety Pillar. The approach was reviewed by a panel of experts from the Future Safety Working Group of the Safety Standing Committee. The approach meets both the CANSO and International Civil Aviation Organisation’s requirements for a Safety Culture (see below).

4. SCOPE OF GUIDE

This guide aims to provide an insight into how NAV CANADA implemented a Safety Pillar Program, detailing why this approach was taken.

5. APPLICABLE STANDARDS AND REQUIREMENTS

CANSO Standard of Excellence in Safety Management Systems

17. Safety Communication (ICAO Element 4.2)

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| Objective | Informal Arrangements | Defined | Managed | Assured | Optimised |
|---|---|--|--|---|--|
| 17.1 Staff are informed about safety and safety management standards which are relevant to their position. | Staff have limited knowledge of SMS processes and procedures. | Limited communication is presented as to why particular safety actions have been taken and/or safety management procedures introduced. Internal communications within the organisation does not focus on safety and its management. | Communication strategies are being developed to ensure that staff are aware of the safety management practices which are relevant to their position. Specific communication strategies are being implemented to address situations where procedures have changed or when critical safety action has been taken. | Communication mediums are regularly assessed for effectiveness. Gaps and deficiencies are acknowledged and addressed. | Safety is a key focus of internal communication. The organisation is looking to increase the number of mediums through which safety messages are sent within the organisation. |
| 17.2 An organisation-wide means to record and disseminate lessons learned and safety critical information. | Safety lessons learned are known only to those who experience them. | There is an intention to develop a means to record and share lessons learned, including the reasons for making change and safety-critical information. This may already happen, but only on an ad hoc basis. | The process for sharing safety lessons learned is systematic and operational and the majority of data is shared with appropriate personnel. The rationale for taking action and making changes to procedures is explained to staff. Safety-critical information is disseminated to all appropriate staff. | All safety lessons learned are systematically shared across the organisation at all appropriate levels. Corrective actions are taken to address lessons learned. | There is clear evidence that the internal lessons learned dissemination process is embedded across the organisation at all levels and is periodically reviewed. |

Extract from CANSO Standard of Excellence in Safety Management Systems

https://www.canso.org/sites/default/files/SMS_CANSO_SoE_16%20Nov%202015.pdf

6. OPERATIONAL AND ORGANISATIONAL CONTEXT

A safety management system (SMS) is only effective with a strong safety culture, yet a strong safety culture requires that SMS processes be shown to be working. This is difficult to achieve with 7 Area Control Centres (ACC), 41 Towers, 55 Flight Service Stations, and 8 Flight Information Centres, geographically dispersed across Canada’s seven Flight

Information Regions (FIR). Having a person at each unit and ACC specialty as the “go-to” person for safety issues would support SMS processes, and promote localized knowledge of their outcomes. This in turn enables more free-flowing communication on safety topics across FIRs and between FIRs and Head Office to support a strong safety culture.

This was the origin for the Safety Pillar Program, which aims to support a strong safety culture, where individuals are well-informed on the human, technical, operational and environmental factors that contribute to overall safety, and where decisions are made based on a sound understanding of the potential safety impacts.

The Program allows NAV CANADA to have a better grasp of what is happening in the field. The Safety Pillars’ expertise is key in finding solutions that fit their environment; there is a definite gain in efficiency within a large organization and the structure such as NAV CANADA. It drives improved employee engagement, as frontline employees are part of the solution to not only actively identify hazards and assess risks but also to develop solutions to address those risks and as well as other safety issues.

The program also allows NAV CANADA to build stronger relationships with our customers and clients by having the Safety Pillars involved with our people locally. Again, the technical expertise of our pillars enhances the quality of customer service we provide due to their knowledge, local presence, and direct connection to the work environments of our clients.

Finally, the Safety Pillars provide a pool of knowledgeable subject matter experts not only with respect to their local operations and challenges but also on all matters related to safety. The Safety Pillars are quickly becoming a valuable source of information for and support for safety initiatives and on-going SMS activities.

7. SAFETY PILLAR PROGRAM DESIGN

To achieve its goal, the Program adopted six principles that set the foundation for how the program operates. The principles for the Safety Pillar Program are:

- **Integration of safety with procedures, technology, proficiency and training.** Addressing safety issues requires support from other areas of the operation. Therefore, one of the key roles for safety pillar program representatives is to coordinate with leads in other areas, such as training, procedures, proficiency and system requirements.
- **Build on existing safety process.** The program’s activities should integrate with existing processes where safety issues are dealt with, such as local Operations, Procedures or Safety Committees.
- **Collaboration across units/specialties.** Sharing best practices and lessons learned across similar specialties and units will help solve current safety issues. This highlights the need for collaborative processes and tools.

- **Collaboration across the industry.** NAV CANADA needs input from Air Operators and Airport Operators for a broad understanding of aviation safety risks and to implement mitigations that will be effective for the industry. This highlights the need for collaborative processes with NAV CANADA stakeholders.
- **Clear lines of communication.** In a shiftwork environment it's important to know who to contact and how, with flexible methods of communication.
- **National consistency in key tasks and activities.** There's a need for some national consistency in the tasks that we have as members of the Safety Pillar team.

8. IMPLEMENTATION AND DELIVERY

The Safety Pillar Program comprises four key procedures which have been implemented through four roles. Both are described below.

8.1 PROGRAM ROLES

There are roles for national and regional coordination, in addition to local expertise. The four roles in the Program include:

1. The Chair of the National Safety Pillar Program

The Chair is appointed from the Safety and Quality department, NAV CANADA's safety assurance department.

Responsibilities:

- Work with stakeholders to develop and implement an annual project for continuous improvement of the program.

2. The Safety Pillar representative

The unit/specialty Safety Pillar representative is appointed by the unit manager and, in most cases, is a supervisor.

Responsibilities:

- To conduct the applicable tasks outlined in the program procedures, described below.
- To participate in National Safety Pillar program forums and discussions.

3. The unit manager

Responsibilities:

- To conduct the applicable tasks outlined in the program procedures. The four procedures are described in the Procedures section of this document.
- To participate in National Safety Pillar program forums and discussions.
- To assist on-boarding new safety pillar representatives.

4. The SMS Operations Coordination Team (SMSOCT)

The SMSOCT comprises management members from each region, plus a national chair. Part of this body's mandate is to support the National Safety Pillar program.

Responsibilities of each FIR's SMSOCT member:

- Communicate the program procedures and task deadlines with FIR site managers and MACCO.
- Coordinate with FIR managers for all specialties/units to meet program deadlines and deliverables.
- Participate in periodic Safety Pillar Program status updates with GM and Chair of SMSOCT.

Responsibilities of the Chair SMSOCT:

- Schedule the periodic Safety Pillar Program status updates with GM and FIR SMSOCT member.
- Coordinate requests by SMSOCT members for assistance on the Safety Pillar Program. These requests will be coordinated with the Chair of the National Safety Pillar Program.

8.1 SAFETY PILLAR PROCEDURES

The people participating in the Safety Pillar Program, whether as Pillars or management support, have accepted these roles in addition to their primary responsibilities. This constrains the Safety Pillar Program's potential scope, with four procedures selected for inclusion. These procedures are:

1. SMS follow-up with an operator's safety officer regarding specific events/issues

A Safety Management System (SMS) Follow-up is an interaction between internal and/or external agencies to gather and share information related to enhancing safety. They are primarily used in support of an investigation, either to gather information from external agencies or to provide NAV CANADA's information to an external agency with whom the appropriate agreements have been established.

A locally designated person will gather information regarding the issue, and then perform SMS follow-up activity providing the results to the Safety Pillar, who in turn will provide those to the employees within the specialty/unit.

2. Close the loop on investigations.

The national investigations team keeps each Safety Pillar up-to-date on all investigation reports for their specialty/unit. The Safety Pillar will review published mitigations with involved employee(s), if so desired by the employee(s), to close the loop on how NAV CANADA is mitigating safety issues.

3. Recommend Mitigations

Managers will enlist Safety Pillars, as appropriate, to provide recommendations for mitigating investigation findings. Through the Safety Pillar, employees are provided an avenue for identifying potential mitigations to ensure a wide perspective of ideas.

4. Top Safety Issues and Action Plan

The Safety Pillar will lead the effort to identify their specialty/unit's top safety priorities with regards to reducing safety risks and develop a local action plan for each priority. These risks are captured in the Unit Risk Register. Addressing some of the safety risks require resources beyond a site's capacity, and these local priorities are consolidated nationally through the National Safety Trend Analysis. Safety Pillar representatives are included in those assessing and prioritizing the company's top safety risks through our Enterprise Risk Management Safety Risk Assessment, providing a ranked list to executive management for final assessment.

9. SUMMARY

The practices in this guide present an example of how one ANSP has designed and implemented a safety culture across all business areas. No single factor is responsible for the success of this campaign; its success can only be attributed to the combination of optimum practices coming together. Through the implementation of a safety culture NATS has improved levels of safety across the whole business.