



Safety Evolution Guide: Integral Safety Management System, SoE 9.2 External Interfaces

LVNL

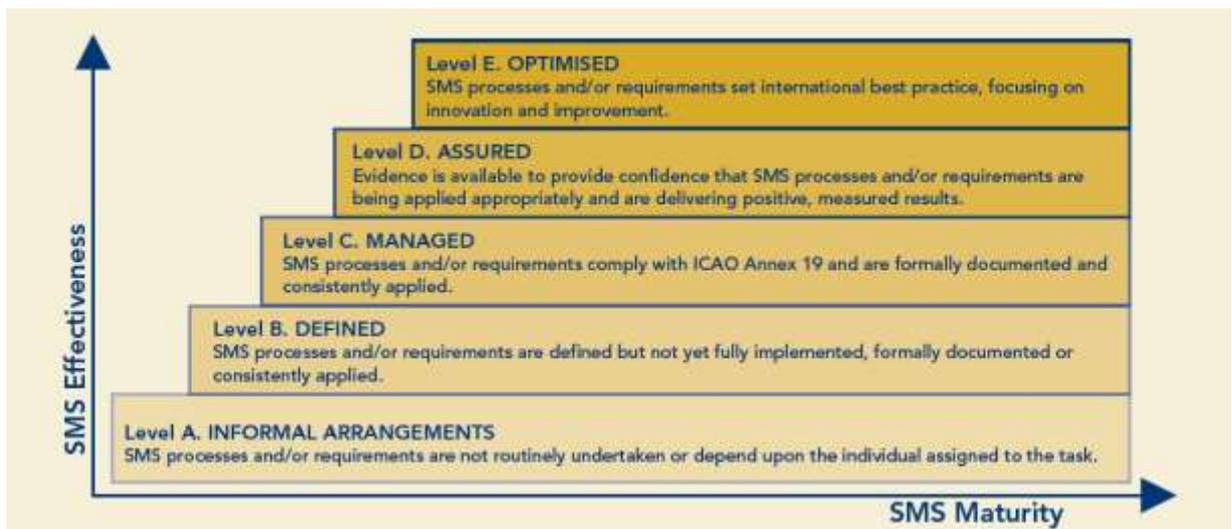
An Evolution Guide for an SMS practice which has been recognised as Optimised by the CANSO Safety Standing Committee

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.



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.

2. OPTIMISED PRACTICE

This guide addresses an SMS process which was identified in 2020 as being optimised, it details how one Air Navigation Service Provider, LVNL, is actively participating in the Integral Safety Management System, a joint approach between the ANSP, airport, airlines and ground handlers to manage safety risks associated with the interaction between individual parties and to learn from each other. The approach was reviewed by a panel of

experts from the Optimised Review Group of the Safety Standing Committee. The approach meets CANSO’s requirements for SoE in SMS Study area 9.2 (see below).

3. SCOPE OF GUIDE

This guide aims to provide an insight into what LVNL has done in the initiation and implementation of the joint approach to safety management, and details why this approach was taken. Examples of the type of activities are included throughout this guide to provide a starting point for other ANSP’s wishing to facilitate a similar development of an Integral Safety Management System.

4. APPLICABLE STANDARDS AND REQUIREMENTS

CANSO Standard of Excellence in Safety Management Systems

9.2 The effective management of external interfaces with a safety impact (e.g., military, airspace users, airports)

Objective	Informal Arrangements	Defined	Managed	Assured	Optimised
9.1 Effectively managed safety-related internal interfaces (e.g. operations and engineering service level agreements).	The various internal interfaces operate in isolation.	The organisation's internal safety-related interfaces are managed on an informal basis.	The organisation's formal safety-related internal interfaces are managed through interface agreements (e.g., letters of agreement (LOAs), memoranda of understanding (MOUs), service-level agreements (SLAs)).	The organisation has established a formal process to regularly evaluate the performance of its interface agreements (LOAs/MOUs/SLAs, etc.).	The organisation has set best practice(s) for safety management for this objective and is willing to share those with other ANSPs/organisations.
9.2 The effective management of external interfaces with a safety impact (e.g., military, airspace users, airports). Formalised processes and procedures for managing external agreements, services, and supplies (e.g., cross-border letters of agreement).	Safety-related external interfaces are managed on an informal basis.	The organisation is preparing or negotiating draft contractual arrangements for all safety-related external interfaces. The organisation has completed at least some contractual arrangements for safety-related external interfaces.	Safety requirements are specified and documented in the appropriate agreements. Activities for all safety-related external interfaces and relationships are coordinated and managed through documented agreements.	The organisation systematically reviews and revises safety requirements within contractual agreements. The organisation systematically reviews the performance of its critical external service providers and suppliers against the contract and takes action as necessary.	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://www.canso.org/system/files/CANSO Standard of Excellence in Safety Management Systems.pdf](https://www.canso.org/system/files/CANSO%20Standard%20of%20Excellence%20in%20Safety%20Management%20Systems.pdf)

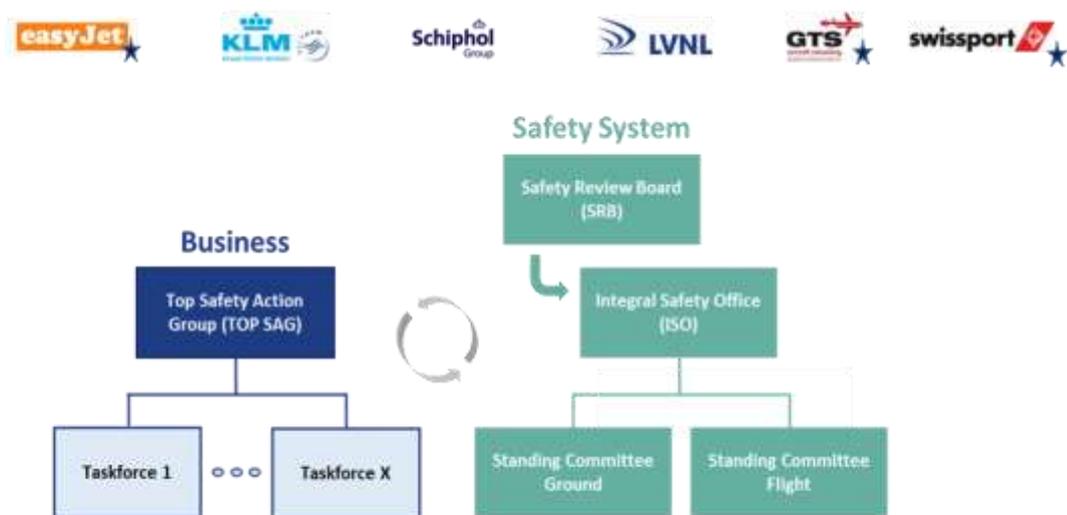
5. CONTEXT

Following a crash of a cargo Boeing 747 into a build-up area of Amsterdam in October 1992, various investigations have been carried out. As a result of one of them, in 1996 industry partners around Amsterdam Airport Schiphol started cooperating in a platform for sharing safety information, called Integral Safety Management System (“Integraal Veiligheids Management System”). That platform was followed up in 2003 by the Safety

Platform Schiphol (“VPS - Veiligheidsplatform Schiphol”). The platform was better equipped and had more workgroups producing positive results, but was still lacking executive power. Consequently in 2017, it was decided to progress into a cooperation agreement that will actually manage the safety on and around the airport, called Integral Safety Management System. The ISMS is formally established by a signed covenant between the industry partners – such as ANSP, airport, airlines and ground handlers - and the government, all committing to mutually agreed targets.

6. INITIATION & COLLABORATION

The structure of the ISMS mimics ICAO and EASA as can be seen in the below diagram .



★ = representing their colleagues

The goal is to Improve (the management of) safety at Schiphol by better cooperation between the organizations involved. The aim of the collaboration is to: collectively have a better safety focus, decide sector-wide on decision-making, achieve a richer safety insight, and execute integral external reporting.

The System is set up after the EASA model of a Safety Review Group, and a Safety Action Group, and an additional Integral Safety Office, two standing committees, and various taskforces, see the below diagram.

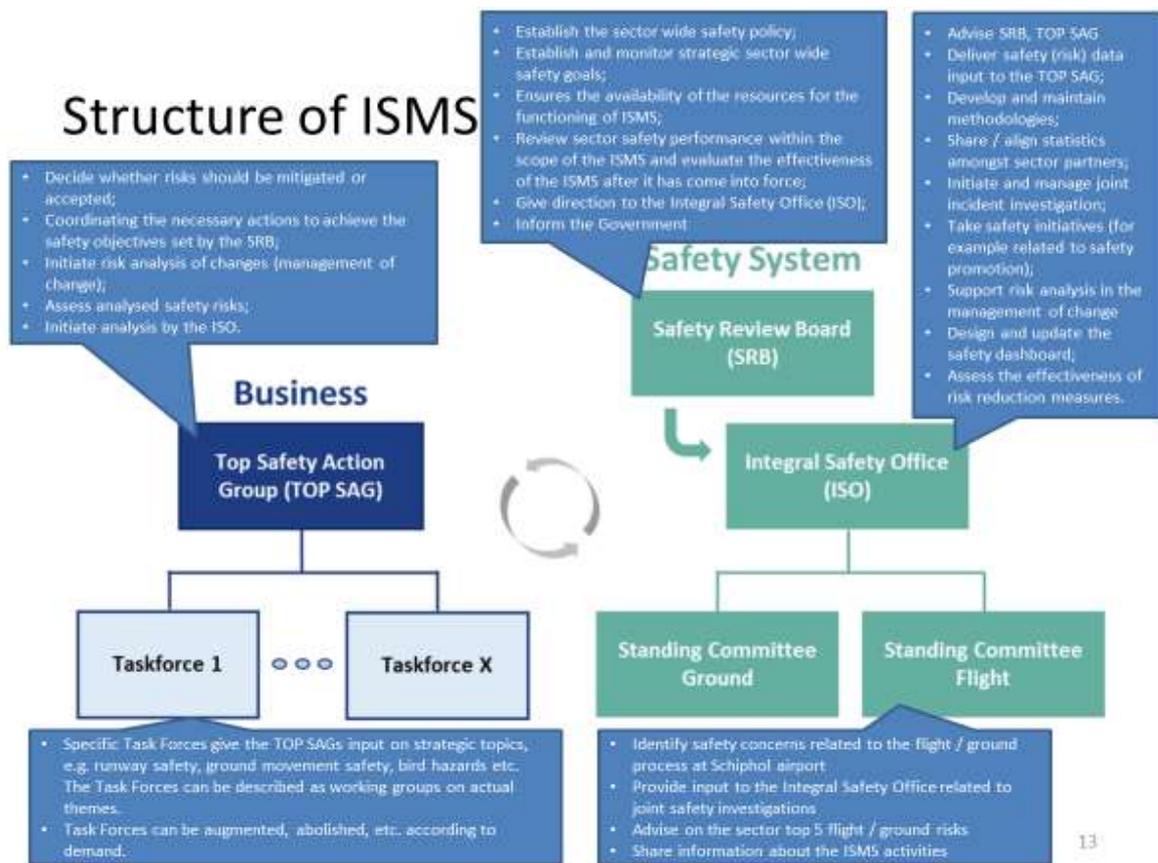


Figure 1 - Structure of ISMS

7. IMPLEMENTATION

Since its establishment in 2018 the collaboration has taken numerous decisions that have influenced the safety of the operations significantly. More so, because of the executive powers of the Safety Review Group and the Safety Action Group, the ISMS can be much more effective than the previous Safety Platform Schiphol (VpS).

ISMS has established working processes. For example, several risk analyses were conducted risk reduction measures have been developed, a covenant was signed with the minister of Infrastructure and Water Management about the development of ISMS in July 2018, and a roadmap with concrete objectives to improve safety has been drawn.

An ISMS manual has been written showing the structure and way of operating of ISMS and is available on request.

To agree on safety measures that need to be taken, a crucial part of the work is the agreed 'common risk matrix', that is being used to decide about the acceptability (or not) of risks.

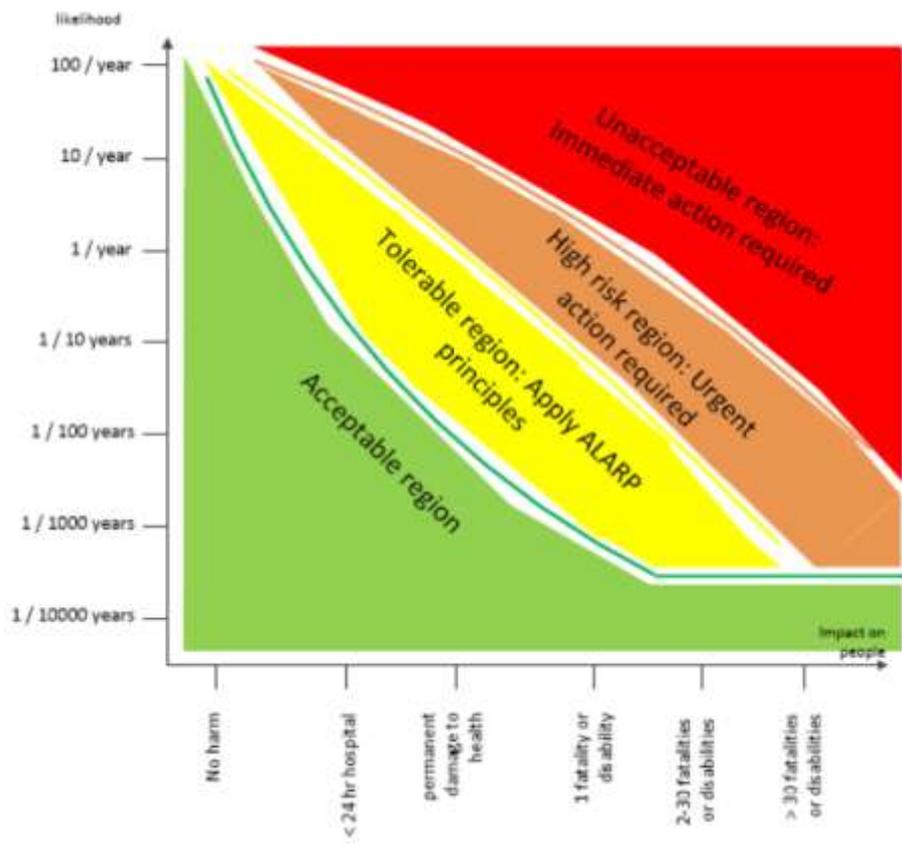


Figure 2 - Initial common Risk Matrix for joint sector ISMS

The ISMS publishes the actual work program on a public website, see <https://integralsafetyschiphol.nl/>

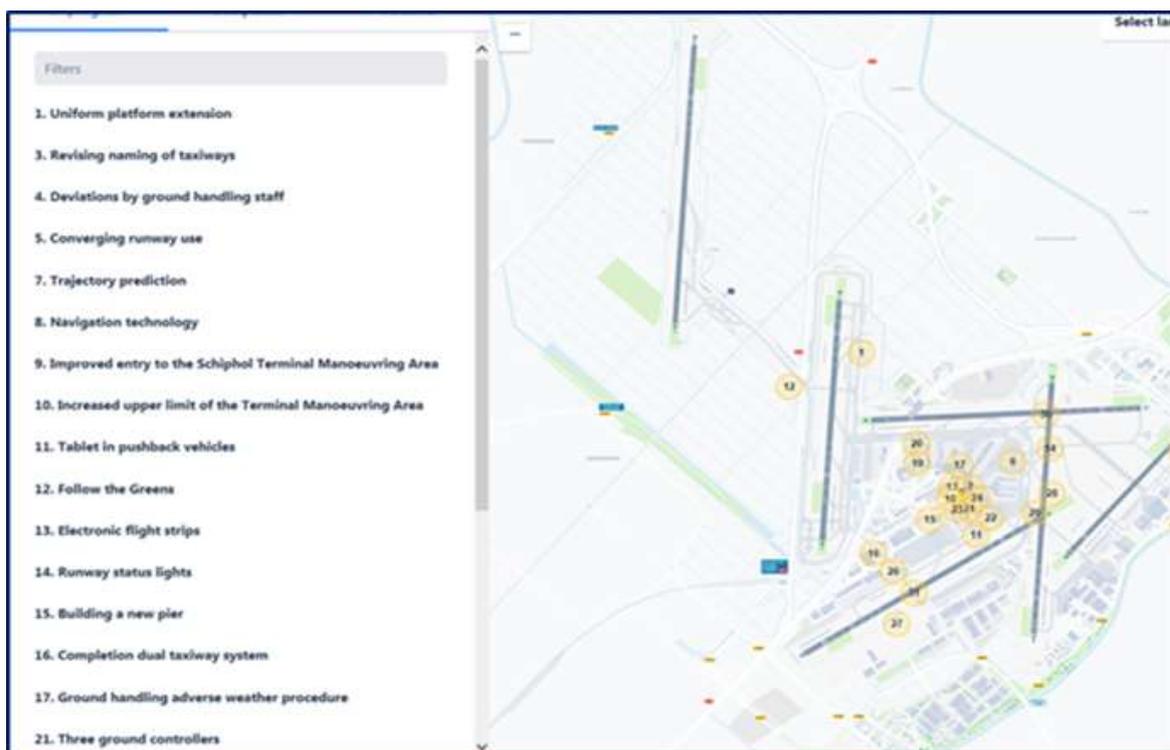


Figure 3 - Excerpt from *integralsafetyschiphol.nl*

8. RESULTS

The ISMS has been reviewed and assessed by Baines Simmons in May 2019. They concluded the ISMS is 'above industry average' and qualifies as a best practice. A quote from their report:

For the ISMS to achieve an assessment score of OPERATING, which is above the aviation industry average, in such a short space of time from its initiation is very impressive and bodes well for the planned development and progression. The success achieved so far can be attributed to the enabling factors around the four pillars of Safety Management that were assessed. Although the enabling factors were not specifically in the scope of the assessment they are key to its current performance and some are worthy of specific mention:

- **Active leadership:** The Accountable Executives of the partner organisations have demonstrated full commitment to the implementation of the ISMS. It is this drive, support and very visible endorsement that has been instrumental to the rapid progress so far.
- **Proactive Culture:** There is a strong, proactive and pragmatic culture with safety at the core of how business is done at Schiphol which meant that once the ISMS was initiated it could rapidly take hold.

9. SUMMARY

The practices in this guide present an example of how one ANSP has designed and implemented an effective management of external interfaces with a safety impact. The strategy sets out a number of steps that can be undertaken with various stakeholders to facilitate such an initiative.

LVNL aims improve integral safety together within legal boundaries and to implement tangible safety measures based on joint analyses and decision-making. Initial effects are noticeable. Next development steps are to expand the safety dashboard and measure effectivity.