SMS Optimised Practice/Good Practice Submission			
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SoE Study Area	5.2 External Interfaces
OP/GP title	Integral Safety Management System
In use since	2018
ANSPs using this practice	Not known

1. Introduction

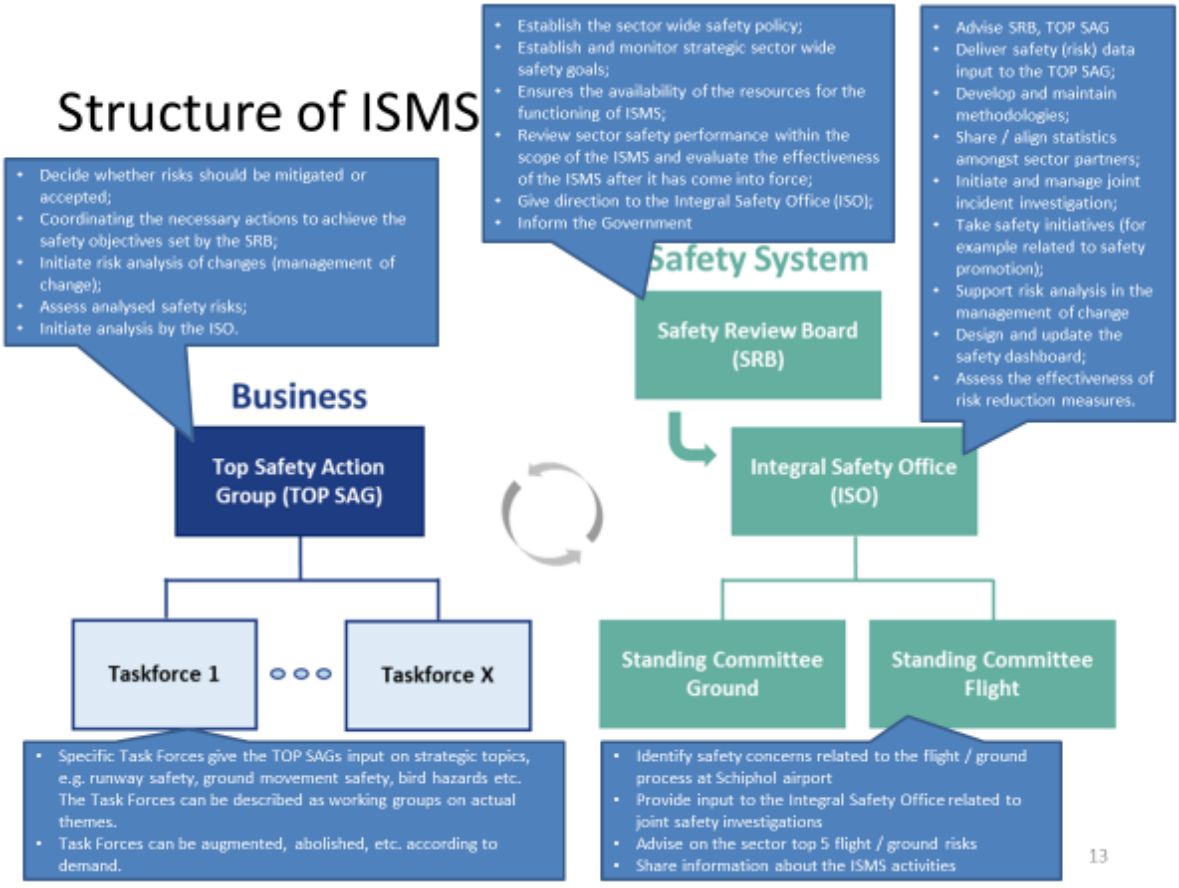
Following a crash of a cargo Boeing 747 into a build-up area of Amsterdam in October 1992, many investigations have been carried out. As a result of one of them, in 1996 industry partners around Amsterdam Airport Schiphol started cooperating in a group for sharing safety information, called **Integral Safety Management System** ("Integraal Veiligheids Management System").

That group was followed up in 2003 by the **Safety Platform Schiphol** ("VPS - Veiligheidsplatform Schiphol"). This platform was better equipped, had significantly more workgroups and produced some very positive results, e.g. better protection against runway incursions, bird control and habitat management, runway lighting, runway crossings, structured communication between airlines, technical/safety pilots and ATC, to name but a few.

In 2017, it was decided to progress into a cooperation agreement that will actually *manage* the safety on and around the airport, (again) called the **Integral Safety Management System** for Schiphol Airport.

2. Organisation setup

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 diagram.



The ISMS was formally established in 2018 and has since then 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 more effective than the predecessor, the Safety Platform Schiphol (VpS).

The ISMS is formally established by a signed covenant between the industry partners and the government, locking both sides to mutually agreed targets.

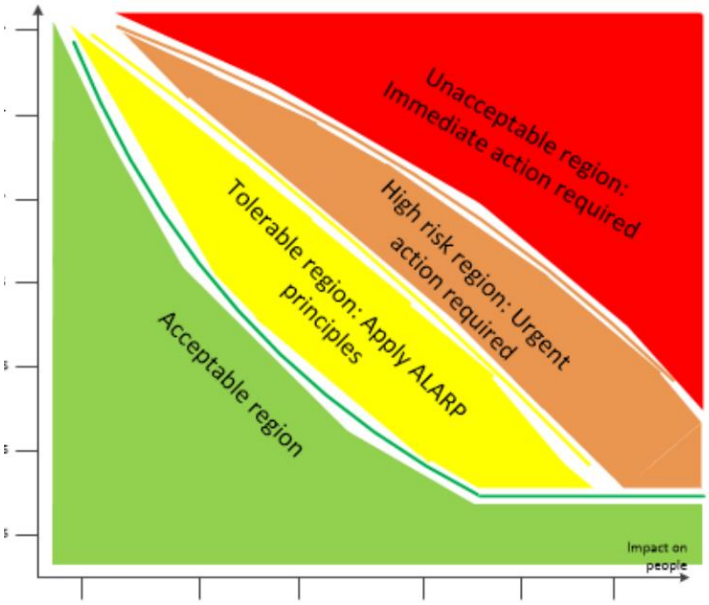
An ISMS manual has been written showing the structure and way of operating of ISMS and is available on request.

3. Public Information

The ISMS publishes the actual work program and the progress thereof on a public website, see https://integralsafetyschiphol.com/

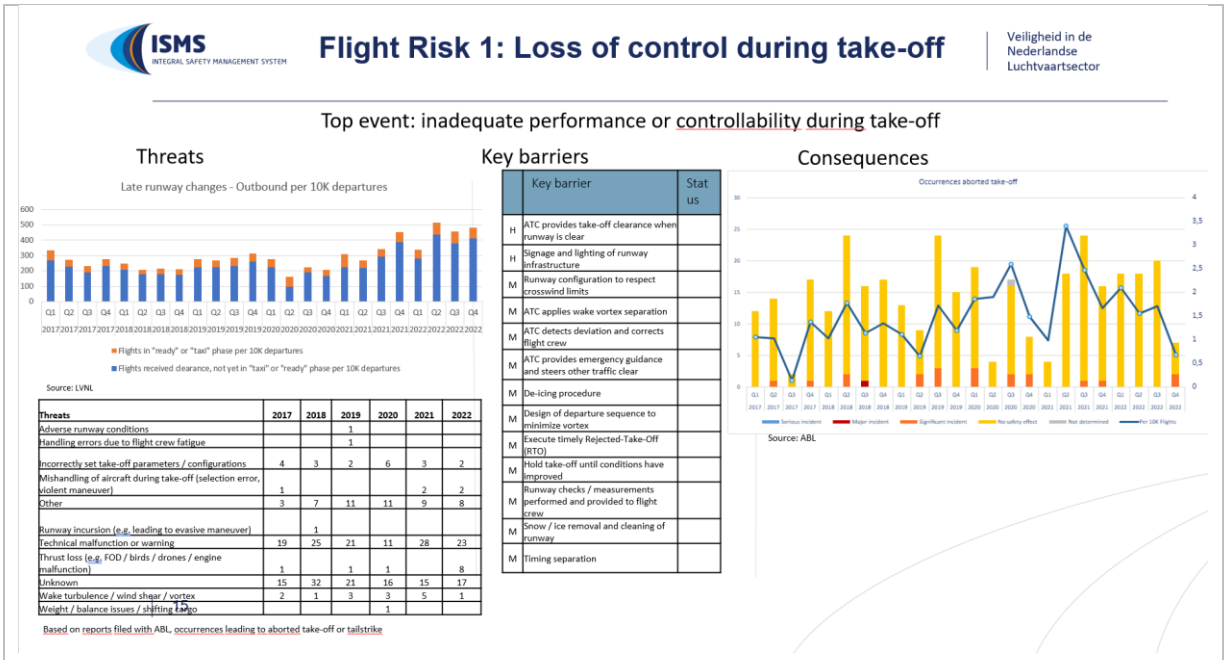
4. Risk Management

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.



Five 'flight' top risks have been identified and described using bowties, with an assessment of the effectiveness of the barriers. Equally, five 'ground' risks have been analyses using bowties.

An example is presented in the figure below, describing "Flight Risk 1: Loss of control during take-off" (status of safety barriers is suppressed for this document):



The bowties are also used as a basis for the safety dashboards for 'flight' and 'ground'. An example for the top-event '*Uncontrolled Manoeuvre - Take-Off*' is represented below, where it can be seen that the data for this specific bowtie is detailed with high granularity:

5. External review and assessment

The ISMS has been reviewed and assessed by Baines Simmons in May 2019, again in 2020 (report September 2020) and repeated this assessment in 2022. They concluded the ISMS is 'above industry average' and qualifies as a best practice. A figure from their report shows the maturity of the organisation:

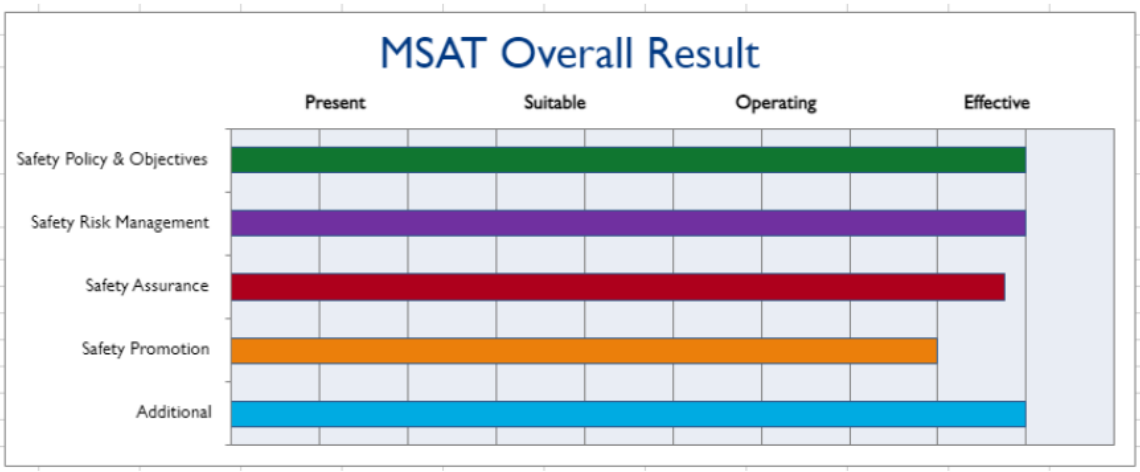


Figure 1: Overall Assessment

The report further states:

> **Assessment** - The overall performance of the management of safety within the ISMS, measured against PRESENT, SUITABLE, OPERATING, EFFECTIVE, as defined by the EASA Management System Assessment Tool (MSAT), is currently assessed as being at Low EFFECTIVE*, which is above the global aviation industry average assessed by Baines Simmons of Low OPERATING, with 35 assessments completed within the last 6 years. In the view of Baines Simmons, the current regulatory requirement (based on EASA Organisational General regulation) is at OPERATING. Given the amount of time that the ISMS has been in place, to achieve an assessment of Low EFFECTIVE and to show continuing improvement from the previous assessment is impressive and considerable effort and commitment have gone into this achievement. Several indicators have already achieved a Mid or High EFFECTIVE scoring which is in an industry leading position. Indeed the average is very close to Mid EFFECTIVE and is the highest result currently seen by Baines Simmons.

By submitting this document, your organisation is willing for the proposed Optimised or Good Practice to be shared with other ANSPs.

For Optimised Practices, this document should be sent together with the SoE in SMS questionnaire, to: soe_2021@eurocontrol.int **by 31st July 2021 at the latest**.

Submissions for consideration as Good Practices may be sent by the above date. They may also be identified during the survey interview sessions with the survey team, following which a Good Practice submission document will be requested.