



LVNL SMS Best Practice/Good Practice Submission			
State whether this is a Best or Good Practice:			
ANSP LVNL		Date of submission	July 18th 2024
SoE Study Area	5.2 External Interfaces		
BP/GP title	Integral Safety Management System		
In use since	2018		
ANSPs using this practice (for BP specifically)	Surprisingly, this initiative has – to my knowledge- not yet been followed. Please note it is NOT 'just' a runway safety team. An RST is one of the safety action groups that is active under this organisation.		
Key Words	Integral SMS		





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 takeoff" (status of safety barriers is suppressed for this document):



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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

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orrectly set take-off parameters / configuration

way incursion (e.g. leading to evasive maneuver)

Technical malfunction or warning Thrust loss (e.g. FOD / birds / drones / engine malfunction)

Wake turbulence / wind shear / vortex Weight / balance issues / shifting Lago Based on reports filed with ABL occur

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:







For Best Practices, this document should be sent together with the SoE in SMS questionnaire, to: <u>soe 2024@eurocontrol.int</u> by 30th June 2024 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 assessment team, following which a Good Practice submission document will be requested.