

**BAINES SIMMONS**  
SAFETY SERVICES

# Safety Management Performance Assessment 2022

## Schiphol ISMS Final Report



November 2022

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## Project Management

Project Client	ISMS Schiphol – Safety Manager
Project Title	Safety Management Performance Audit
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## Contents

<b>A. Executive Summary .....</b>	<b>9</b>
A.1 Environmental Factor (Context) .....	9
A.2 Assessment.....	9
<b>B. Objective and Scope.....</b>	<b>18</b>
B.1 Background.....	18
B.2 Scope.....	18
B.3 Objective.....	18
B.4 Task Breakdown .....	18
B.5 Deliverables.....	19
<b>C. Definitions and Methodology – EASA Management System Assessment Tool (MSAT).....</b>	<b>20</b>
C.1 Introduction .....	20
C.2 How and when the tool is used.....	20
C.3 Credit for other oversight activities .....	21
C.4 Dealing with multiple certificate holders .....	21
C.5 Tool guidance.....	22
C.6 Applicability .....	22
C.7 Definitions used in the tool.....	23
C.8 Level of detail to be recorded.....	23
C.9 Addressing findings and observations.....	24
<b>1. Safety Policy and Objectives.....</b>	<b>25</b>
1.1 Management Commitment.....	25
1.2 Safety Accountability and Responsibilities.....	31
1.3 Appointment of Key Personnel.....	34
1.4 Emergency Response - not in scope of Performance Audit.....	35
1.5 SMS Documentation .....	36
<b>2. Safety Risk Management.....</b>	<b>38</b>
2.1 Hazard Identification .....	38
2.2 Risk Assessment and Mitigation .....	40
<b>3. Safety Assurance .....</b>	<b>42</b>
3.1 Safety Performance Monitoring and Measurement .....	42
3.2 The Management of Change .....	44
3.3 Continuous Improvement of the SMS.....	45
<b>4. Safety Promotion .....</b>	<b>46</b>
4.1 Training and Education .....	46
4.2 Safety Communication.....	48
<b>5. Additional Items to be Considered .....</b>	<b>50</b>
5.1 Interface Management .....	50
5.2 Responsibilities for Compliance and Compliance Monitoring Function.....	51
<b>D. Recommendations.....</b>	<b>55</b>

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## A. Executive Summary

This section outlines the environmental factors, key themes and overall assessment criteria.

### A.1 Environmental Factor (Context)

Every organisation is susceptible to its own set of unique external influences and, when assessing an organisation’s maturity, it is imperative that relevant business and environmental factors are understood, as these factors may have an impact on diagnostic results.

This Performance Assessment was conducted in November 2022 and is the third assessment in a series of three. The first was conducted in 2019 and the second virtually (due to Covid) in late 2020. The Baines Simmons principal consultant has conducted all three assessments to provide continuity and consistency but the second consultant team member has deliberately differed each time to combat bias and over-familiarity.

Whilst Schiphol Integral Safety Management System (ISMS) is not a regulated entity, the organisation exists to enhance safety across the interfaces of the partners and is mandated by government covenant as part of the State Safety Programme. The ISMS has been in place for just over 4 Years and during this period has matured well, due to the attention and resource placed upon it. The ISMS project was established on the initiative of the sector parties as the past safety coordination meeting structure was deemed ineffective. The Dutch Safety Board (OVV) also raised a report into The Safety of Air Traffic at Schiphol (APR 2017) where concerns required addressing. The first period of the ISMS plan is coming to a close and the next phase with new safety ambitions, objectives and top risks is planned. The ISMS is an organisation that consists of the sector partners and is governed by their Accountable Executives jointly. This has contributed to the results and key themes below:

### A.2 Assessment

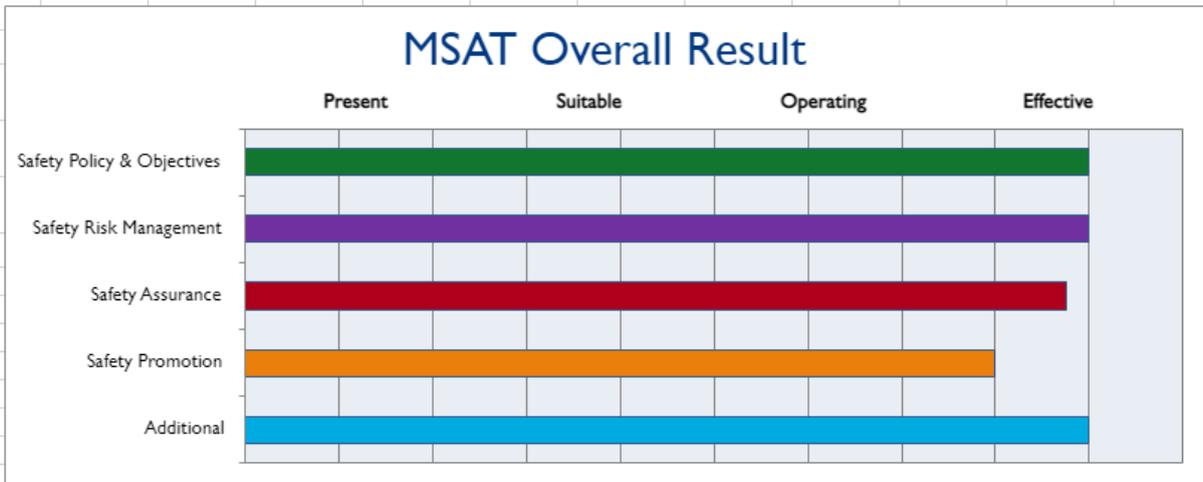
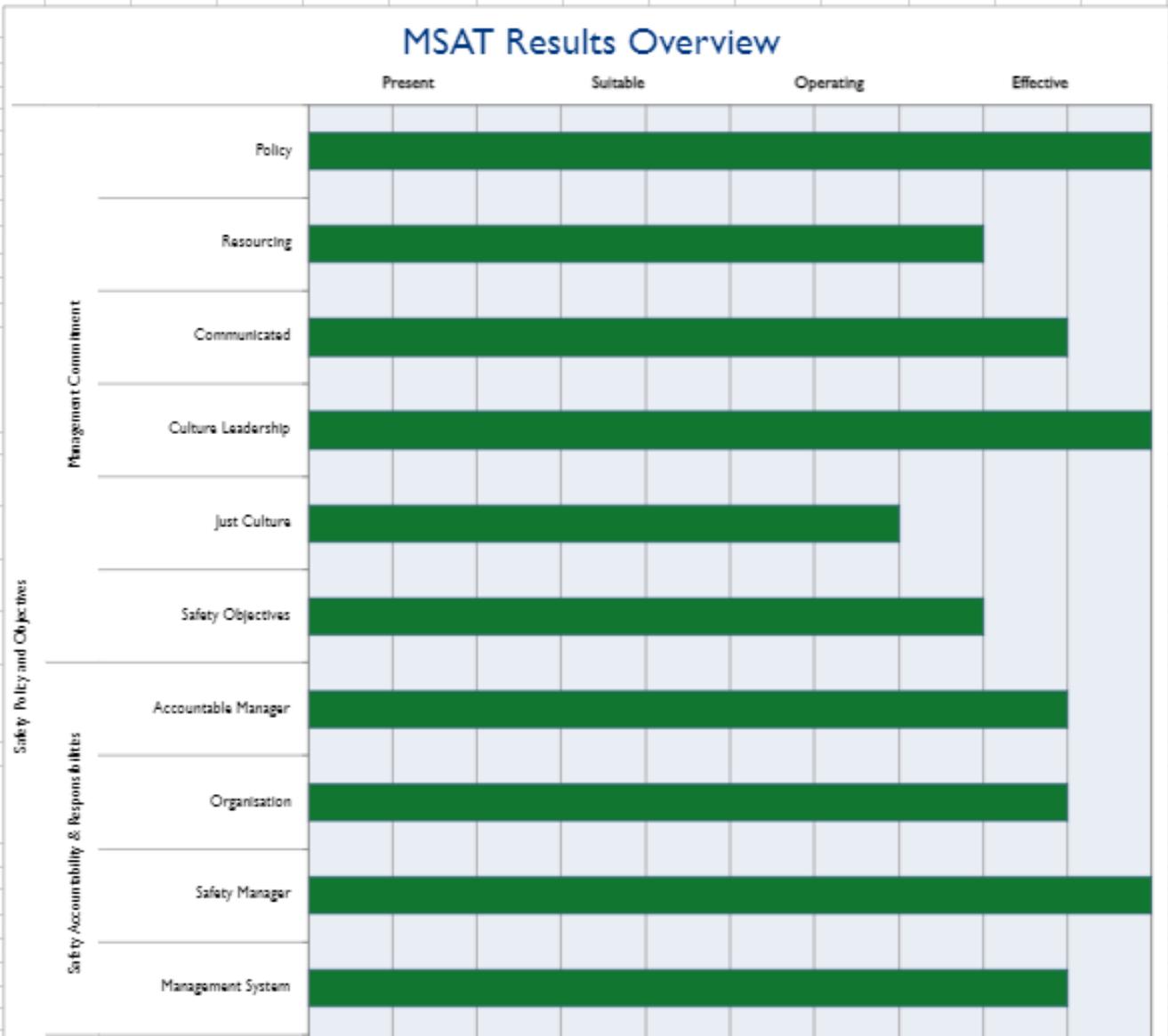


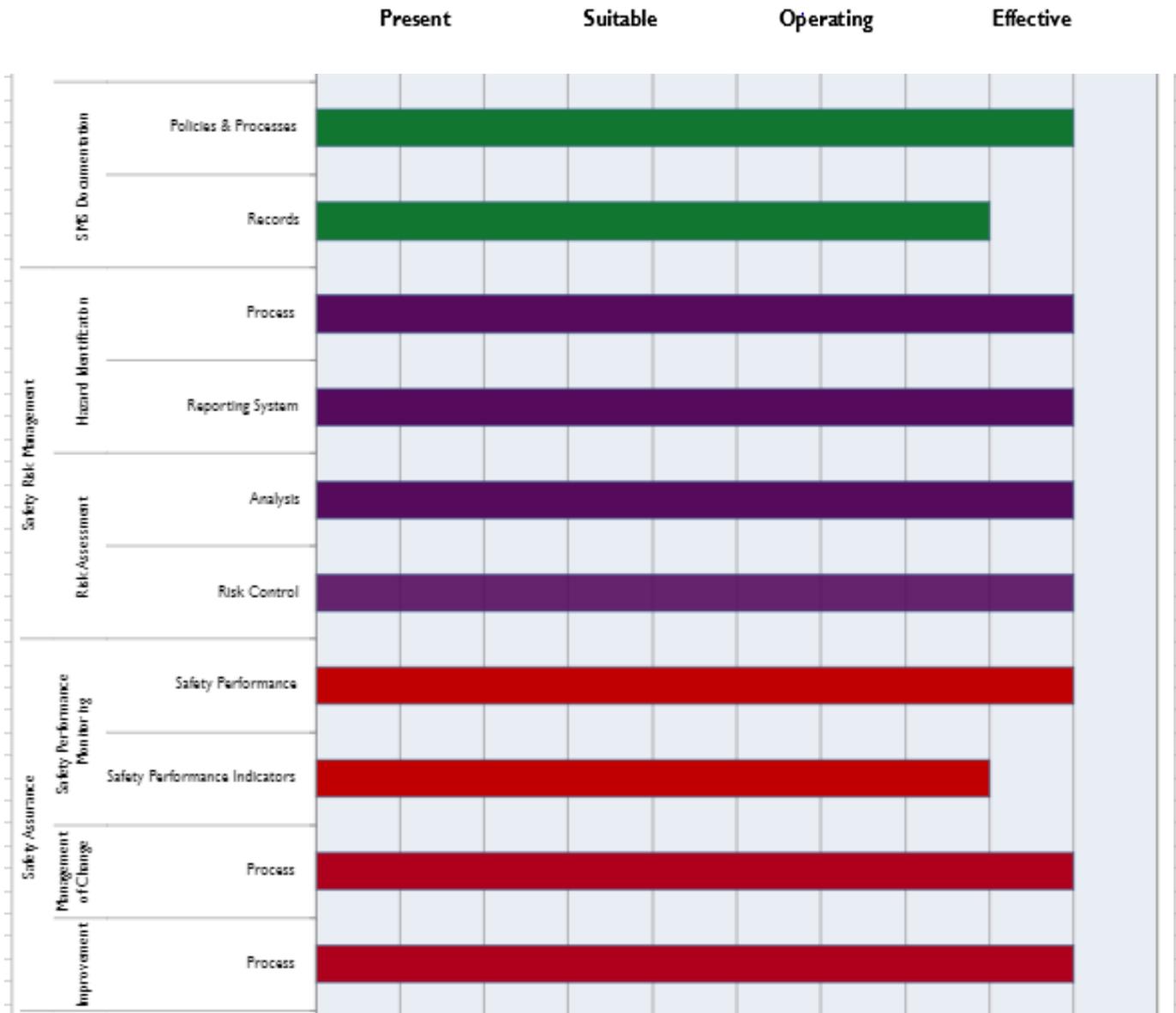
Figure 1: Overall Assessment

**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.

\*Low EFFECTIVE shows that on average indicators assessed were in the Lower end of the MSAT definition for EFFECTIVE which is: There is evidence the feature is effective and achieving the desired outcome.

**Assessment Breakdown** – On the next page is a breakdown of the assessment by the MSAT Pillars and Sections:





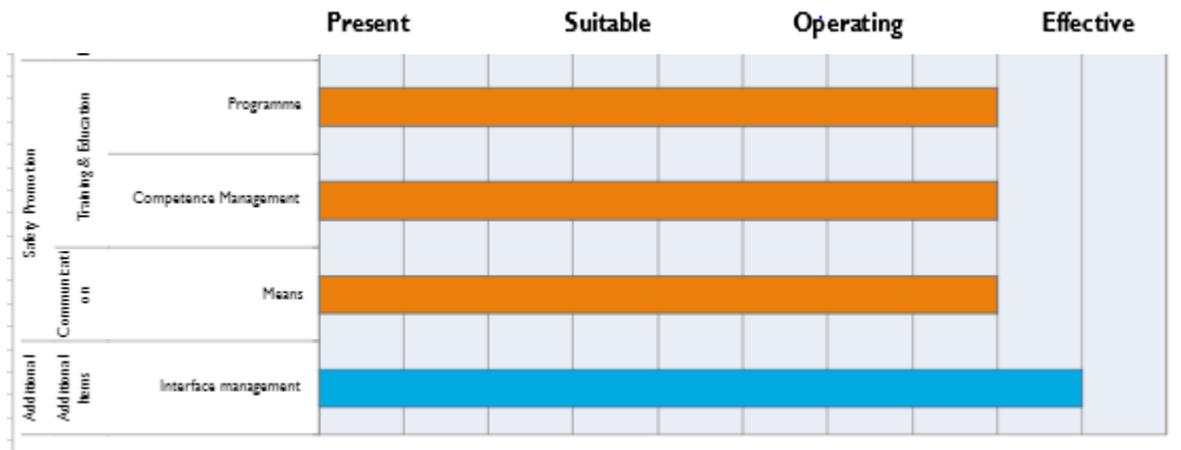


Figure 2: MSAT Results Overview Chart

**Key Themes.** A more detailed set of conclusions for each component can be found in Sections 1 to 5; however, a few key themes, both positive and those where improvements could move the management system further to EFFECTIVE, are highlighted here:

▶ **Safety Policy and Objectives**

The Safety Policy is very well documented and there is clear understanding and endorsement of the policy by the accountable executives. The policy and procedures set a very firm foundation as to how the ISMS performs and this is well established. The ISMS manual and the meeting structure is a leading example of how a management system can be structured and functions. Improvements and the consolidation upon the previous foundations place this area as EFFECTIVE. The addition of Just Culture (more explicit), Resourcing (proof of forecasting) and Documentation Records (demonstrating the use of safety records in enhanced database analysis with ABL) has enabled Effectiveness.

▶ **Safety Risk Management**

Safety Risk Management within the ISMS is mature and is an area of good competence. The identification of hazards (safety concerns), risk assessments and risk mitigation are fully established and continue to function well. The use of the Risk Assessment Workshop, involving subject matter experts and data from the National Aerospace Laboratory (NLR), is an innovative and appropriate way to assess risk across the partner interfaces, providing insight to the Top Safety Action Group (TOPSAG) and Safety Review Board (SRB) who have the accountability to mitigate those risks to an acceptable level. The focus on Top 5 Risks for Flight and Ground and the Roadmap continues to demonstrate results and those risk areas will be reviewed, with new areas and risks envisaged. There is evidence of good risk assessment activity, including risks from the management of change process. The area of risk control has improved and there is a robust, mature and EFFECTIVE Safety Risk Management system in place, enabling the Accountable Executives to make risk based, data driven decisions.

**▶ Safety Assurance**

The process to evaluate Roadmap actions taken both for verification (are they implemented?) and validation (are they effective?) alongside the output of these shows that areas of Safety Assurance are EFFECTIVE. The Safety Performance indicators are set against clear safety objectives and the Top 5 Risks Flight & Ground are EFFECTIVE. The dashboard includes innovative functionality showing precursor events (Threats), the effectiveness of barrier controls (under development and partially implemented) and the consequences experienced. This dashboard monitors the safety performance and there are robust validation events taking place which are monitored by the TOPSAG and SRB meetings. The improvements made to this area and the mature output that is produced clearly demonstrate that this area is EFFECTIVE.

**▶ Safety Promotion**

The Integral Safety Office (ISO) addressed previously highlighted deficiencies and implemented a competence framework and training programme for ISO staff and now the Programme Director. The training delivered to ISO staff is also now being reviewed for effectiveness. The individual partners each have their own training programmes and there are clear Skills and Qualities required of the ISMS team members defined to ensure that competent staff are involved. The ISMS is a support function to the individual partners in providing information that can be used for Safety Promotion and is not intended to supersede these but enhance them and there is evidence of joint communication output. The very existence of the ISMS also promotes safety and sharing of best practice across the partners and benefits everyone who operates at Schiphol, the output of the ISMS, for example the dashboard, has enabled this. There are recently improved procedures in the ISMS Manual to ensure a coordinated view of the ISMS communication role across the interfaces. This area is assessed as being EFFECTIVE.

**▶ Additional Items to be considered****○ Interface Management**

The main purpose of the ISMS is to manage the interfaces between the partners and as it matures it is demonstrating industry leading practices. There is demonstrable value in the ISMS as an entity and it is an instrumental tool in ensuring and assuring safety at Schiphol Airport. This area is assessed as EFFECTIVE.

**○ Compliance Monitoring**

As there is no regulation that the ISMS is required to meet, there is nothing for them to be compliant to, rendering compliance monitoring not applicable. This Performance Assessment is in part a form of compliance against the ISMS' own procedures and their appropriateness but there is now also in place an internal compliance monitoring programme to assure that the ISMS complies with its own manual. The ISMS partners' internal Compliance Monitoring

teams are used for this, as well as considering the interface between their own SMS and the ISMS. In addition, there will be a 3 year audit either by the National Authority (ILT) or a consultant such as Baines Simmons to assess SMS Maturity using this MSAT Tool. As there was no formal assessment made of this area previously, it has not been included in the scoring but there are significant improvements in the area and it will become more applicable, so may be considered in future assessments.

► **Schiphol Safety Improvement Covenant Questions**

In answer to the questions within the covenant and with reference to the performance assessment conducted it can be said:

That the degree to which the ISMS operate towards established procedures is assessed at EFFECTIVE level, in that the ISMS is following its established procedures and has a well documented and industry leading Safety Management System.

To which degree is safety demonstrably increased by sound cooperation between sector parties is assessed at an EFFECTIVE level in that the Safety Management System is mature and produces effective output, with demonstrable evaluation of actions taken, enabling the Sector partners to make risk based, data driven decisions,

To which degree that ISMS elements described in Article 6 (of the Covenant) are operating is assessed at EFFECTIVE in that there is evidence of output in the stipulated areas:

- There is the management of safety risk across interfaces.
- That there is an effective SMS set up on the ICAO and EU guidelines.
- Joint Incident Investigations have taken place, a risk management methodology has been established, there is control of risk and an effective evaluation of action taken with verification and validation implemented.
- Decisions have been made to ensure timely implementation of safety measures and these are continuing.
- Safety Ambitions and Objectives have been set with measurable targets in place, these are regularly reviewed.

To which degree are ISMS results described in Article 7 (of the Covenant) realised is assessed as in full compliance as the deadlines have been achieved. There are Joint Risk analysis, Joint Investigations, Five primary Risks determined in both the Flight Operations and Ground Handling environments and a handbook (Manual) established. There will be an additional risk environment of Ground Movements included in the future, as this is an area identified by the ISMS for focus.

**▶ Overall**

For the ISMS to achieve an assessment score of EFFECTIVE, which is above the aviation industry average, improving from its already impressive foundation is a clear demonstration of the continued passion and commitment to safety improvement amongst the ISMS partners. The success achieved so far can be attributed to the enabling factors around the four pillars of Safety Management that were assessed here.

For a Management System to succeed the core elements that the MSAT assesses need to be functioning but also there are vital enablers that provide the fertile environment for the system to take hold and flourish. 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 continue to demonstrate full commitment to the consolidation and continued improvement of the ISMS. It is this drive, support and very visible endorsement that has been instrumental to the progress made since the previous assessment, which was already at a level where some organisations could be satisfied and not prioritised further improvement, but that is not the case here, even with the challenging background of the Covid pandemic and the post-Covid ramp up, ISMS maturity was important as it demonstrated results and is of benefit. The change of some Accountable Executives since the last assessment and the fact that those new individuals also show extremely strong support for the ISMS, demonstrate very clearly that the ISMS and the safety culture that it generates is firmly embedded in the way Schiphol operates and is not personality driven, which was a previous potential concern.

- 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 rapidly took hold and was given the opportunity to flourish. There is an embedded safety culture and a desire to continuously improve.

- Managed Competence

Throughout the series of performance assessments the consultant team has been impressed by the level of competence demonstrated by ISO staff and Sector partners, as well as their drive and commitment. There is good training available, a culture of improvement, succession planning and a wealth of talented individuals for key safety positions.

- Supportive Capability

A robust and well considered structure has been developed for the ISMS which has again aided the implementation, consolidation and now maturity. The ISMS is well resourced and with the support of external agencies such as the NLR and ABL gives the ISMS every opportunity to provide credible safety improvement to the aviation sector within Schiphol. There continues to be development of innovative and productive tools to support even greater effectivity.

The project to place a Safety Management System on top of the regulated individual Management Systems to fully exploit the maximum safety benefit from the interfaces, which are often overlooked or poorly managed, can be considered industry leading and has great potential for the improvement of safety. It is a model that continues to be best practice, even industry leading, and an example of how airports and the aviation partners within can work together, which others could learn from.

The ISMS can be considered established in place and functioning at a Low EFFECTIVE level. This is industry leading and the effectiveness of the organisations' enablers has produced this level of maturity. The ISMS is a great example of the benefit of the management system approach to safety and how it brings credible, demonstrable benefit to an organisation. The journey of improvement to reach this EFFECTIVE level has been very satisfying for the consulting team to observe.

## B. Objective and Scope

### B.1 Background

The Schiphol Integral Safety Management System have engaged Baines Simmons to conduct a Performance Audit (PA) utilising the EASA Management System Assessment tool (MSAT).

### B.2 Scope

Partner	Location
ISMS ISO x2	AMS
KLM (Airline)	AMS
LVNL (Air Traffic)	AMS
Royal Schiphol Group x3	AMS
Representative Ground handling	AMS

The scope of the PA is defined by the Partners as identified above and the topic areas identified in the MSAT. We have used our professional consulting techniques to gather facts and findings on which we have formed conclusions and where appropriate high-level recommendations. Our approach of considering the human-in-the-system during the PA addresses the resultant behavioural markers of staff, to arrive at a considered opinion of the management system performance.

### B.3 Objective

**The objective of the PA** is to provide Schiphol ISMS with a formal, independent and unbiased confirmation of the level of management system performance that includes:

- ▶ A review of how effective the work done by the ISMS to date has been in building its management systems
- ▶ Assessing the extent of any gaps against the ISMS desired status of EFFECTIVE on the PSOE scale.

### B.4 Task Breakdown

- ▶ **Planning Stage:** The Principal Consultant nominated as Project Manager conducted a project team launch meeting and orientation; scoping, planning and initiation. In addition, a remote document review was also conducted.
- ▶ **On-site phase.** Information was captured and documented from one-to-one interviews and focus groups. This involved staff at all levels and any relevant stakeholders to provide a robust assessment of the partners in scope.

- ▶ **Analysis.** Comments, evidence and observations collected throughout our engagement were captured as facts (confirmed using cross checking techniques), plotted against the evaluation criteria below and subsequently grouped in order to develop findings and conclusions.
- ▶ **Report Writing Phase:** This report details the findings and conclusions, including an Executive Summary and industry benchmarking.
- ▶ **Report Presentation:** The report will be delivered by the Baines Simmons Project Manager to the Guidance Committee.

## B.5 Deliverables

The key deliverables are:

- ▶ A report with key results including:
  - An assessment of the constituent parts of the ISMS against the EASA MSAT and PSOE performance markers
- ▶ Report presentation to the ISMS SRB summarising the conclusions.
  - Follow up meeting virtually, fitting in with meeting schedule, to discuss the conclusions.

## C. Definitions and Methodology – EASA Management System Assessment Tool (MSAT)

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### C.1 Introduction

**Note:** *The following information is primarily extracted from the EASA Management System Assessment Tool (MSAT) ver 1.0 as intended for guidance to regulators. Baines Simmons have applied our QIEJ (Question, Indicators, Evidence and Judgement) assessment methodology to the Key Performance Questions (KPQs) of the MSAT.*

ICAO Annex 19 promotes a common approach to safety management and safety oversight across aviation domains. This document provides a common assessment methodology focusing both on assessment and continual improvement of the Management System/SMS within the scope of authority oversight.

A common approach to assessing Management System/SMS effectiveness supports competent authorities to evolve from traditional, compliance-based oversight to performance-based oversight, provides a common baseline for Management System/SMS effectiveness assessment and creates a sound basis for mutual acceptance of SMS under bilateral agreements.

The assessment tool is designed to be used by competent authorities but it could also be used by organisations, to assess the effectiveness of their own Management System/SMS, for the purpose of continuous improvement. The resulting assessment could be discussed with the competent authority, in order to obtain a common understanding of Management System/SMS effectiveness. Organisations could also use the tool to assess the Management System/SMS of subcontract organisations.

### C.2 How and when the tool is used

This Management System assessment tool may be used for both initial certification (initial implementation of the Management System/SMS) and continuing oversight. In this case the tool is used to understand the maturity of the management system at this moment, which can then be revisited to assess progress and development.

#### C.2.1 Initial certification/implementation

Before issuing the certificate, the competent authority should make sure that all processes are PRESENT and SUITABLE, so that all the required enablers of a functioning SMS are implemented by the organisation. In this initial certification phase, a large part of the SMS assessment could be carried out by a desktop review of relevant Management System/SMS Documentation. However, carrying this out at the organisation provides an opportunity for the inspector to advise and guide the

organisation on its Management System/SMS implementation and support standardised implementation.

## C.2.2 Continuing oversight

After initial implementation, the organisation should start using the Management System/SMS as part of its operations. The competent authority should ensure that within the first oversight planning cycle the organisation's Management System/SMS processes are PRESENT, SUITABLE and OPERATING. An organisation may eventually have EFFECTIVE processes, which is the evidence of an EFFECTIVE SMS. In order to check that SMS processes are indeed OPERATING and/or EFFECTIVE the Management System/SMS should be re-evaluated on a regular basis to assess how well it is performing. The review should assess all of the items in the assessment tool which can be done by a combination of organisational visits, meetings and desk top reviews.

As an organisation's Management System/SMS processes mature and it moves to OPERATING and EFFECTIVE this may also require the 'suitability' criteria to be revisited. Changes to an organisation's approval may also require a reconsideration of the suitability of the SMS processes. So when significant changes take place the competent authority may determine the need to review the existing assessment to ensure it is still appropriate.

## C.3 Credit for other oversight activities

Valuable information about Management System/SMS effectiveness can be gained from other oversight activities. This may include such activities as routine compliance audits and inspections, occurrence investigations and meetings with the organisation. This should be taken into consideration by the inspector through liaison with other inspectors involved in the oversight of the organisation. Competent Authorities may also consider giving credit where an organisation has received accreditation for meeting an industry standard.

## C.4 Dealing with multiple certificate holders

In the case of an organisation holding multiple approval certificates, the use of the Management System/SMS assessment tool should follow the rule "1 Management System/SMS = 1 assessment". Therefore, if one organisation integrates all certificates within a single Management System/SMS, the assessment should consider the Management System/SMS as a whole.

Yet, it may be the case that different teams of inspectors oversee the same Management System/SMS with regard to different certificates, and a single assessment may be impracticable. In such case, the different assessments should be shared with the various teams of inspectors, and a common message coming from the competent authority(ies) should be provided.

## C.5 Tool guidance

The tool assesses the compliance and effectiveness of the Management System/SMS through a series of features based on ICAO Annex 19 Second Edition and EASA Management System requirements for organisations. It is set out using the 12 elements of the ICAO SMS Framework and some additional EASA Management System requirements. Each feature should be reviewed to determine whether the feature is PRESENT, SUITABLE and OPERATING and EFFECTIVE, using the definitions and guidance set out below.

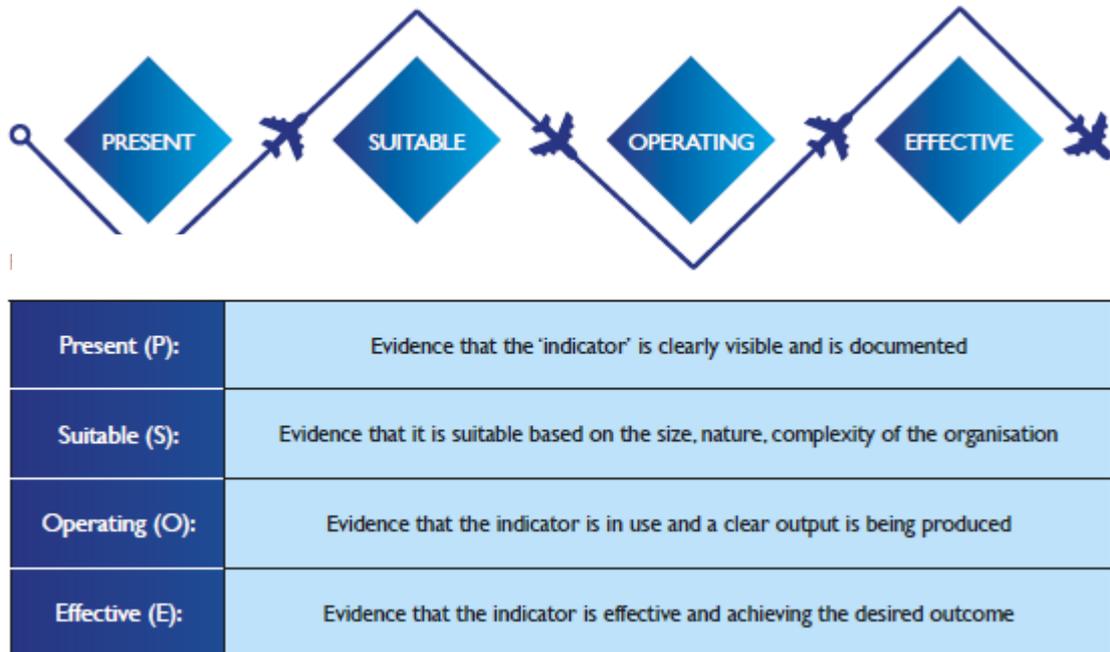
The tool is used by the competent authority inspector to evaluate and record the assessment. Alternatively, it can be partially completed by the organisation to assess itself and by the competent authority to verify and validate the organisation's assessment.

## C.6 Applicability

The assessment tool can be used to assess any size of organisation. However, due consideration should be given to the size, nature and complexity of an organisation to assess whether the individual feature of the SMS is SUITABLE. Inspectors should refer to any existing EASA regulations that define what the management system/SMS may look like for non-complex organisations when considering if a feature is SUITABLE. The competent authority should also consider any applicable Alternative Means of Compliance as part of the Management System/SMS assessment.

The tool has been designed to capture the generic Management System/SMS requirements. As currently there are no common EASA Management System/SMS requirements there may be some additional sector specific requirements that may need to be considered as part of the assessment.

## C.7 Definitions used in the tool



*Figure: 3 PSOE Definitions*

For PRESENT, OPERATING and EFFECTIVE a 'word picture' is included to help the inspector determine the correct level. There is no word picture for SUITABLE as this is specific to the individual organisation and impossible to define for all types and sizes of organisations. It is the responsibility of the organisation to determine the suitability and to justify to the competent authority who will then assess it.

The PSOE level should be considered as progressive; it must first be PRESENT, then confirmed as SUITABLE, then it becomes OPERATING and may then be EFFECTIVE. During ongoing assessments the suitability should be reassessed taking into account changes to the organisation and its activities.

An item cannot be considered EFFECTIVE if it is not PRESENT because if it is not documented it cannot be carried out consistently and systematically.

## C.8 Level of detail to be recorded

It is important that the inspector using the assessment tool records evidence of the assessment. Evidence includes documentation, reports, records of interviews and discussions. For example, for an item to be PRESENT the evidence is likely to be documented only, whereas for assessing whether it is OPERATING it may involve assessing records as well as face to face discussions with personnel within an organisation.

## C.9 Addressing findings and observations

The current findings definitions used in EU regulations are not consistent across domains and do not necessarily fit the Management System/SMS assessment which requires more focus on the effectiveness of the processes. Observations should be used to identify areas for continuous improvement and encourage a positive safety culture.

For the initial certification or as part of a transition to new Management System/SMS requirements for existing certificate holders all the processes should be PRESENT and SUITABLE. If any are not then the approval should not be granted or transition accepted. Once a Management System/SMS is OPERATING and transition periods expired, during the assessment if a process is found not to be OPERATING, a finding should be raised.

Where a feature is found not to be effective the inspectors may consider issuing an observation to give rise to suggested improvements. However, findings should not be issued if the process is OPERATING but not EFFECTIVE.

The completed assessment tool with the competent authority remarks from the assessment or at least a summary of the Management System/SMS assessment should be provided to the organisation along with a report that captures any findings and observations. Providing the organisation with detailed comments of the assessment will assist in continuous improvement of the Management System/SMS and supports a positive safety culture at a State level.

# I. Safety Policy and Objectives

## I.1 Management Commitment

Annex 19 reference & text				
1.1.1 The service provider shall define its safety policy in accordance with international and national requirements. The safety policy shall:				
e) be signed by the accountable executive of the organisation				
g) be periodically reviewed to ensure it remains relevant and appropriate to the service provider				
PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE	
There is a safety policy that includes a commitment to continuous improvement, observe all applicable legal requirements, standards and considers best practice signed by the accountable manager.		It is reviewed periodically to ensure it remains relevant to the organisation.	The accountable manager is familiar with the contents of the safety policy.	
Verification Examples				
<ul style="list-style-type: none"> <li>• The Safety Policy is documented within the ISMS Manual, current version 3.0, updated in July 22.</li> <li>• The document is in use and periodically reviewed by the core team as to suitability. There is evidence of evaluation.</li> <li>• Evidence that approval of policy and manual discussed at the ISMS Safety Review Board (SRB).</li> <li>• The policy is not signed as the ISMS is a joint organisation but all SRB members (accountable for their own organisations) are familiar with the contents.</li> <li>• The Schiphol Safety Improvement Covenant also commits the organisation to continuous improvement.</li> <li>• Appendix L to the Manual (Safety Ambitions and Objectives 2020-22) supports the Safety Policy and highlights explicit demands this also demonstrates an extended understanding.</li> </ul>				
Conclusion				
The policy meets and exceeds industry best practice standards and is suitable in the context of the joint nature of the ISMS. The policy and manual have been recently updated, incorporating additional processes and objectives. The assessment of High EFFECTIVE reflects that the policy and manual is an intrinsic part of how business is completed and not just a shelf bound document.				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Org.
ORO.GEN.200 'Management system' point (a)(2) and (a)(6) AMC1 ORO.GEN.200(a)(2) 'Management system' - [complex operators] AMC1 ORO.GEN.200(a)(1)(2)(3)(5) 'Management system' point (e) - [non-complex operators]	ORA.GEN.200 'Management system' point (a)(2) and (a)(6) AMC1 ORA.GEN.200(a)(2) 'Management system' - [complex organisations] AMC1 ORA.GEN.200(a)(1)(2)(3)(5) 'Management system' point (e) - [non-complex organisations]	ADR.OR.D. 005 'Management system' point (b)(2) and AMC1 ADR.OR. D.005 'Management system' point (b)(2)	ATS.OR.200 'Safety management system' Point (1) AMC1 ATS.OR.200(1) (i) Safety management system SAFETY POLICY — COMPLEX ATS PROVIDERS AMC1 ATS.OR.200(1); (2); (3) Safety management system GENERAL [non-complex ATS providers]	ATCO.OR.C.001 'Management system of training organisations' point (b) AMC1 ATCO.OR.C.001(b) Management system of training organisations SAFETY POLICY

**Annex 19 reference & text**

1.1.2 The safety policy shall

b) include a clear statement about the provision of the necessary resources for the implementation of the safety policy

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
The safety policy includes a statement to provide appropriate resources.		The organisation is assessing the resources being provided to deliver a safe service and taking action to address any shortfalls.	The organisation is reviewing and taking action to address any forecasted shortfalls in resources.

**Verification Examples**

- ISMS Integral Safety Organisation is well resourced with competent persons.
- The Safety Review Board (SRB) has responsibility of providing suitable resource as per the ISMS manual.
- The SRB members interviewed understood their resource commitment.
- The Schiphol Safety Improvement Covenant demonstrates commitment to improvement.
- Evidence from SRB minutes of meeting that resource discussed on agenda.
- Continuing use of external consultants enables flexibility and scalability of resource.
- The Roadmap and its workplan are regularly reviewed for progress and assessment of resource both in time and cost.
- ISMS data used in prioritizing Double-Q taxiway expansion.

**Conclusion**

The Safety Review Board members understand and demonstrate their commitment of resource to the ISMS. The assessment is now Low EFFECTIVE with continued, demonstrable improvements in the ISMS and control of resource. The system has matured and actively uses data from the ISMS to make resource decisions.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
AMC1 ORO.GEN.200(a)(2) 'Management system' - [complex operators]	AMC1 ORA.GEN.200(a)(2) 'Management system' - [complex organisations]	AMC1 ADR.OR. D.005 'Management system' point (b)(2)	ATS.OR.200 'Safety management system' Point (1)	ATCO.OR.C.001 'Management system of training organisations' 'point (b)
AMC1 ORO.GEN.200(a)(1)(2)(3)(5) 'Management system' point (e) - [non-complex operators]	AMC1 ORA.GEN.200(a)(1)(2)(3)(5) 'Management system' point (e) - [non-complex organisations]		and related AMCs/GM	and related AMCs/GM

**Annex 19 reference & text**

1.1.3 The safety policy shall

f) be communicated, with visible endorsement, throughout the organisation See

2.1.2 for c) include safety reporting procedures

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
There is a means in place for the communication of the safety policy.		The safety policy is communicated to all personnel (including relevant contract staff and organisations).	People across the organisation are familiar with the policy and can describe their obligations in respect of the safety policy

**Verification Examples**

- Policy well understood by all interviewees.
- SRB members could fully and freely describe their obligations in respect to both the safety policy and Schiphol Safety Improvement Covenant.
- Policy within ISMS manual, little external communication but in context of the joint nature of the ISMS not needed. Fully known by those that need to know but not necessary to communicate across all staff within all organisations as could confuse with own safety policy.
- Connection to Ground Handling environment not as strong or embedded as in the rest of the organisation.

**Conclusion**

The policy was well understood and very clearly endorsed at all levels, especially by Senior Management within the SRB.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
AMC1 ORO.GEN.200(a)(2) 'Management system' - [complex operators] Point (a)(3) Not addressed for non-complex operators	AMC1 ORA.GEN.200(a)(2) 'Management system' - [complex operators] Point (a)(3) Not addressed for non-complex organisations	ADR.OR.D. 005 'Management system' point (b)(2) and AMC1 ADR.OR. D.005(b)(2) 'Management system' point (a)(4)	ATS.OR.200 'Safety management system' (1)(i) AMC1 ATS.OR.200(1)(i) 'Safety management system' SAFETY POLICY — [complex ATS providers] AMC1 ATS.OR.200(1); (2); (3) Safety management system GENERAL [non-complex ATS providers]	AMC1 ATCO.OR.C.001(b) 'Management system of training organisations' point (d)

**Annex 19 reference & text**

1.1.4 The safety policy shall

a) reflect organisational commitment regarding safety, including the promotion of a positive safety culture

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
The management commitment to safety is documented within the safety policy.		The accountable manager and the senior management team are promoting their commitment to the safety policy through active and visible participation in the safety management system.	Decision making, actions and behaviours reflect a positive safety culture and there is good safety leadership that demonstrates commitment to the safety policy.

**Verification Examples**

- Generally good Accountable Executive attendance at SRB (no substitute policy), where there has been absences, strong follow up and demonstration of priority of accountability.
- Accountable Executives are able to articulate policy.
- Accountable Executives clearly committed.
- Positive attitude towards safety and the ISMS by all interviewees.
- Clearly proven that decisions are made based on data and risk assessments.
- Clearly defined commitment with safety ambition and objectives driving improvements made.
- Newly in post Accountable Executives demonstrated clear commitment to ISMS and the value they place on it.
- The ISMS as a way of working is embedded and “how business is done”.

**Conclusion**

Safety and risk based decision making is high on the agenda of the Executive and this is recognised and reflected by the staff. There are demonstrable behaviours that encourage a positive safety culture. In previous assessments there were concerns that the success of the ISMS could be due to the individual Accountable Executives in post and with recent replacements in two of those positions, these concerns were unfounded, as the ISMS is fully embedded and systematic, supporting safety and accountability decisions. This area is assessed as High EFFECTIVE.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
AMC1 ORO.GEN.200(a)(2) 'Management system' point (a)(2) - [complex operators]	AMC1 ORA.GEN.200(a)(2) 'Management system' point (a)(2) - [complex organisations]	ADR.OR.D. 005 'Management system' point (b)(2) and AMC1 ADR.OR. D.005 'Management system' point (a)(3)	ATM/ANS.OR.B.015(a)(2) GM3 ATM/ANS.OR.B.005(a)(2) Management system SAFETY CULTURE and ATS.OR.200 'Safety management system' (1)(i) AMC1 ATS.OR.200 (1)(i) 'Safety management system'	AMC1 ATCO.OR.C.001(b) 'Management system of training organisations' points (c), (e) and (f)
AMC1 ORO.GEN.200(a)(1)(2)(3)(5) 'Management system' point (e) - [non-complex operators]	AMC1 ORA.GEN.200(a)(1)(2)(3)(5) 'Management system' point (e) - [non-complex organisations]			

**Annex 19 reference & text**

1.1.5 The safety policy shall

d) clearly indicate which types of behaviors are unacceptable related to the service provider’s aviation activities and include the circumstances under which disciplinary action would not apply.

See also Reg. (EU) 376/2014 Article 16.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
A Just Culture Policy and principles have been defined that clearly identifies acceptable and unacceptable behaviours to promote a Just Culture.		There is evidence of the Just Culture policy and supporting principles being applied and promoted to staff.	The Just Culture policy is applied in a fair and consistent manner and people trust the policy.  There is evidence that the line between acceptable and unacceptable behaviour has been determined in consultation with staff and staff representatives.

**Verification Examples**

- ISMS manual has High OPERATIONAL commitment to Just Culture principles and section 5.4 is dedicated to this.
- Accountable Executives understand and are committed to Just Culture.
- There were numerous examples where it was stated that all parties feel freely able to speak at ISMS meetings, such as Standing Committees, TOPSAG, SRB, etc.
- The Joint Safety Investigations are carried out in just manner (Example ISMS-JIR202201).
- There is no Just Culture tool in use.
- The ISMS Just Culture is dependent on the Just Culture of the individual partner organisations.
- Non-disclosure agreements in place protect sector parties.
- Traditionally the Ground Handling environment can suffer from a more immature Just Culture than other areas, there was some mention that could be the case here, but circumstantial and not evidenced during this time limited assessment.

**Conclusion**

A Just Culture is evident and Just Culture principles are now explicit in the ISMS Manual. All parties are able to openly discuss issues at meetings and there is a good understanding of Just Culture and its benefits. The ISMS Just Culture is assessed as High OPERATIONAL but due to the dependency on all parties individual Just Culture levels gaining an Effective level may be challenging.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
Reg. 376/2014 Article 16(11)  AMC1 ORO.GEN.200(a) (2) 'Management system' point (a)(4) 'safety reporting principles' - [complex organisations]	Reg. 376/2014 Article 16(11)  AMC1 ORO.GEN.200(a) (2) 'Management system' point (a)(4) 'safety reporting principles' - [complex organisations]	Reg. 376/2014 Article 16(11)  ADR.OR.D. 005 'Management system'  AMC1 ADR.OR. D.005(b)(2) 'Management system' point (b)(3)	Reg. 376/2014 Article 16(11)  ATS.OR.200 'Safety management system' (1)(i)  AMC1 ATS.OR.200(1) (i) 'Safety management system' SAFETY POLICY – [complex ATS providers]  ATM/ANS.OR.A.065	Reg. 376/2014 Article 16(11)  AMC1 ATCO.OR.C.001(b) 'Management system of training organisations'

**Annex 19 reference & text**

(New Std. 1.1.2)

1.1.6 Taking due account of its safety policy, the service provider shall define safety objectives.

The safety objectives shall:

- a) form the basis for safety performance monitoring and measurement as required by 3.1.2
- b) reflect the service provider’s commitment to maintain or continuously improve the overall effectiveness of the SMS
- c) be communicated throughout the organisation
- d) be periodically reviewed to ensure they remain relevant and appropriate to the service provider.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
Safety objectives have been established that are consistent with the safety policy and there is a means to communicate them throughout the organisation.		Safety objectives are relevant to the organisation and are being regularly reviewed and are communicated throughout the organisation.	Achievement of the safety objectives is being monitored by senior management and action taken to ensure they are being met.

**Verification Examples**

- Safety Ambitions and Objectives are outlined in Appendix L of the ISMS Manual.
- From the areas of Continuous Safety Improvements, Safety Risk Management and Proactive Safety Planning, six specific Safety Ambitions and six related Safety Objectives were derived for 2022. These ambitions and objectives follow the SMART principles, are astute and reflect the core safety business. (SMART; Specific, Measurable, Achievable, Relevant, Resourced and Time bound.)
- Criteria for success have been set.
- There is a planned review to set the 2023-2025 Ambitions.
- Monitoring of the objectives takes place at ISMS meetings, with the Core Team informing SRB.

**Conclusion**

Safety Objectives are clear, structured, regularly reviewed, and monitored and are operating at an EFFECTIVE level. There has been clear development and maturity in a once weaker area (Performance Assessment 2019).

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
AMC1 ORO.GEN.200(a)(2) ‘Management system’ point (c)(3) - [complex organisations]	AMC1 ORA.GEN.200(a)(2) ‘Management system’ point (c)(3) - [complex organisations]	AMC1 ADR.OR.D.005(b)(2) Management system point (c)(3)	ATM/ANS.OR.B.005(a)(3) ‘Management system’	ATCO.OR.C.001 Management system of training organisations
AMC1 ORO.GEN.200(a)(3) Management system point (d)(1) - [complex organisations]	AMC1 ORA.GEN.200(a)(3) Management system point (d)(1) - [complex organisations]		AMC2 ATM/ANS.OR.B.005(a)(3) Management system	AMC1 ATCO.OR.C.001(b) Management system of training organisations
AMC2 ORO.GEN.200(a)(5) Management system point (a) - [complex organisations]	AMC2 ORA.GEN.200(a)(5) Management system point (a) - [complex organisations]		AMC1 ATS.OR.200(1)(i) Safety management system	SAFETY POLICY
			SAFETY POLICY — COMPLEX ATS PROVIDERS point (b)(3)	

## 1.2 Safety Accountability and Responsibilities

### Annex 19 reference & text

1.2.1 The service provider shall

a) identify the accountable executive who, irrespective of other functions, is accountable on behalf of the organisation, for the implementation and maintenance of an effective SMS

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
An accountable manager has been appointed with full responsibility and ultimate accountability for the SMS.		The accountable manager ensures that the SMS is properly resourced, implemented and maintained and has the authority to stop the operation if there is an unacceptable level of safety risk.	The accountable manager ensures that the performance of the SMS is being monitored, reviewed and improved.

#### Verification Examples

- The ISMS is not a classic organisation as it consists of several partners which all have accountable executives so there is not one accountable entity but the Safety Review Board is the executive committee.
- All SRB members must be accountable within their own organisation.
- An operational understanding of safety management is a key requisite of an accountable executive involved in the ISMS.
- There are Clear Terms of Reference for the Accountable Executives. (ISMS Manual Appendix B)
- The evaluations and adjustments to the progress of the Roadmap demonstrate that the ISMS is being monitored, reviewed and improved.
- Documented evaluation of Effectiveness of Roadmap measures (ISMS-2022|3R)
- There have been improvements to ISMS procedures.
- A change in Accountable Executives has not altered the path of the ISMS and it continues to mature with full support and commitment.
- The upcoming (1<sup>st</sup> Jan 23) implementation of a license to operate for Ground Handlers to address a potential drift in safety culture.

#### Conclusion

The SRB is visibly engaged in ensuring the Management System is EFFECTIVE.

The committee approach to accountability within the joint organisation is clearly documented and functions well with the current SRB members, even after some recent changes. There are robust discussions and clear decisions are made with all SRB members embracing the idea that an integrated safety and cross functional approach continues to be beneficial for all.

#### Corresponding EU/EASA Requirements

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 'Management system' point (a)(1)	ORA.GEN.200 'Management system' point (a)(1)	ADR.OR.D.015 'Personnel requirements' point (a)	ATS.OR.200 'Safety management system' point (1)(ii)(iii)	ATCO.OR.C.001 Management system of training organisations, (a)
ORO.GEN.210 'Personnel requirements' point (a)	ORA.GEN.210 'Personnel requirements' point (a)		AMC1 ATS.OR.200(1)(ii);(iii) Safety management system  ORGANISATION AND ACCOUNTABILITIES  AMC2 ATS.OR.200(1)(ii);(iii) Safety management system  ORGANISATION AND ACCOUNTABILITIES [complex ATS providers]	ATCO.OR.C.010 'Personnel requirements' point (a)

**Annex 19 reference & text**

1.2.2 The service provider shall

- b) clearly define lines of safety accountability throughout the organisation, including a direct accountability for safety on the part of senior management,
- c) identify the responsibilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the organisation
- d) document and communicate safety accountability, responsibilities, and authorities throughout the organisation,
- e) define the levels of management with authority to make decisions regarding safety risk tolerability.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
The safety accountability, authorities and responsibilities are clearly defined and documented.		Everyone in the organisation is aware of and fulfil their safety responsibilities, authorities and accountabilities and encouraged to contribute to the SMS.	The accountable manager and the senior management team are aware of the risks faced by the organisation and safety management system principles exist throughout the organisation so that safety is part of the everyday language.

**Verification Examples**

- The ISMS consists of representatives from the various partners meeting and cooperating to provide a safety management system, the organisational structure and governance is well documented (ISMS Manual section 2.4).
- The ISMS functions through a structure of meetings, these are:  
Safety Review Board  
Top SAG (Safety Action Group)  
Core Team  
Standing Committee Flight  
Standing Committee Ground  
Standing Committee Ground Movement (New)  
Task Forces  
Workshops (for example the Risk assessment workshop)  
Safety Expert Pool  
These meetings are well structured and documented to provide credible insight and information into risk exposure.
- There were several mentions that the cadence of the meeting structure meant that safety, hazard identification and risk management were embedded into everything that was done.
- The Top 5 Risks for Flight and Ground are defined, reviewed and performance monitored, as are emerging risks.
- The Top Risks are under review (not necessarily 5) and will also be defined for the new area Ground Movement.

**Conclusion**

Senior Leaders' safety responsibilities and authority are clearly documented, understood and carried out. The monitoring of safety performance against set objectives and the assurance and evaluation of actions taken has matured. The ISMS organisation is structured and functions well.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
b) ORO.GEN.200 'Management system' point (a)(1)	b) ORA.GEN.200 'Management system' point (a)(1)	b) ADR.OR.D. 005 'Management system' point (b)(1)	b) ATM/ANS.OR.B.005(a)(1) and (b), ATS.OR.200 'Safety management system' (1)(ii)	b) ATCO.OR.C.001 'Management system of training organisations' point (a)
c) ORA.GEN.200 'Management system' point (a)(1)  ORO.GEN.210 'Personnel requirements' points (a) and (b)	c) ORA.GEN.200 'Management system' point (a)(1)  ORA.GEN.210 'Personnel requirements' points (a) and (b)	c) ADR.OR.D. 005 'Management system' (b)(1) and ADR. OR.D.015 'Personnel requirements' (a);(b)	c) ATM/ANS.OR.B.005(a)(1) and ATS.OR.200(1)(ii)	c) ATCO.OR.C.001 'Management system of training organisations' point (b)  ATCO.OR.C.010 Personnel requirements, point (a) and (b)

<p>d)</p> <p>ORO.GEN.200 'Management system' point (a)(5)</p> <p>AMC1 ORO.GEN.200(a)(5)</p> <p>AMC2 ORO.GEN.200(a)(5) [complex operators]</p>	<p>d)</p> <p>ORA.GEN.200 'Management system' point (a)(5)</p> <p>AMC1 ORA.GEN.200(a)(5)</p> <p>AMC1 ORA.GEN.200(a)(5) [complex organisations]</p>	<p>d)</p> <p>ADR.OR.D.005 'Management system' point (c), AMC1 ADR. OR.D.005(c) 'Management system' and AMC2 ADR. OR.D.005(c) 'Management system'</p>	<p>d)</p> <p>ATM/ANS.OR.B.005(a)(1) and ATS.OR.200 'Safety management system' (1)(ii)</p>	<p>d)</p> <p>ATCO.OR.C.001 'Management system of training organisations', point (e)</p>
<p>e)</p> <p>AMC1 ORO.GEN.200(a) (3) 'Management system' point (b)(2) - [complex operators]</p> <p>AMC1 ORO.GEN.200(a) (1)(2)(3)(5) 'Management system' point (d) - [non- complex organisations]</p>	<p>e)</p> <p>AMC1 ORO.GEN.200(a) (3) 'Management system' point (b)(2) - [complex operators]</p> <p>AMC1 ORO.GEN.200(a) (1)(2)(3)(5) 'Management system' point (d) - [non- complex organisations]</p>	<p>e)</p> <p>AMC1 ADR.OR.D.005(b)(4) 'Management system'</p>	<p>e)</p> <p>ATM/ANS.OR.B.005(a)(1) and ATS.OR.200 'Safety management system' (1)(ii)</p>	<p>e)</p> <p>ATCO.OR.C.001 'Management system of training organisations'</p>

### 1.3 Appointment of Key Personnel

**Annex 19 reference & text**

1.3.1 The service provider shall appoint a safety manager who is responsible for the implementation and maintenance of the SMS.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
A competent safety manager who is responsible for the implementation and maintenance of the SMS has been appointed with a direct reporting line with the accountable manager.	See Annex 19 Note:	The safety manager has implemented and is maintaining the SMS.  The safety manager is in regular communication with the accountable manager and escalates safety issues when appropriate.	The safety manager is competent to manage the SMS and identifying improvements in a timely manner.  There is a close working relationship with the accountable manager and the safety manager is considered a trusted advisor and given appropriate status in the organisation.

**Verification Examples**

- The Safety Manger (SM) has meetings with the SRB chair and has an effective relationship.
- The SM demonstrates a high level of competence in their role.
- Accountable Executives report being comfortable with role of SM and ISO. The SM is well regarded and listened to.
- Attends SAG and Core Team meetings - well engaged.
- SM is able to manage a busy workload and delegate where necessary.
- The SM reports to the SRB.
- Demonstrable evidence that the SM is effective and is progressing the ISMS with continuing improvements made.
- SM has a competence development plan and this is reviewed in meetings with Accountable Executive.
- SM is gaining additional roles so a monitoring of capacity advised.

**Conclusion**

The Safety Manager (Director of ISO) is a highly competent individual in post with EFFECTIVE relationships with senior managers. Fulfills role of trusted advisor.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.210 'Personnel requirements' point (b)	ORA.GEN.210 'Personnel requirements' point (b)	ADR.OR.D.015 'Personnel requirements' point (c) and AMC1 ADR.OR.D.015(c) 'Personnel requirements'	ATS.OR.200(1)(iii)	ATCO.OR.C.010 Personnel requirements
AMC1 ORO.GEN.200(a)(1) 'Management system' point (a)(1)- [complex operators]	AMC1-ORA.GEN.200(a)(1) 'Management system' point (a) (1)- [complex organisations]			
AMC1 ORO.GEN.200(a) (1);(2);(3);(5) 'Management system' point (c)- [non-complex operators]	AMC1-ORA.GEN.200(a) (1);(2);(3);(5) 'Management system' point (c)- [non-complex organisations]			

Annex 19 Note: Depending on the size of the service provider and the complexity of its aviation products or services, the responsibilities for the implementation and maintenance of the SMS may be assigned to one or more persons, fulfilling the role of safety manager, as their sole function or combined with other duties, provided these do not result in any conflicts of interest.

1.3.2 EASA reference: Management System AMCs for complex organisations				
PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE	
The organisation has established appropriate safety committees(s) that discuss and address safety risks and compliance issues and includes the accountable manager and the heads of functional areas.		There is evidence of meetings taking place in accordance with the terms of reference detailing the attendance and frequency of meetings. The safety committees monitor the effectiveness of the SMS and compliance monitoring function by reviewing there are sufficient resources, actions are being monitored and appropriate safety objectives and SPIs have been established.	Safety committees include key stakeholders. The outcomes of the meetings are documented and communicated and any actions are agreed, taken and followed up in a timely manner. The safety performance and safety objectives are reviewed and actioned as appropriate.	
Verification Examples				
<ul style="list-style-type: none"> <li>Comprehensive structure of safety meetings.</li> <li>Changes are discussed for safety implications and business plans are drawn up of funding needed for mitigations.</li> <li>Safety Objectives are set and monitored. (ISMS Manual Appendix L and Top SAG Minutes April 2022)</li> <li>Safety Ambitions are updated on a 3 year cycle and Safety Objectives annually.</li> <li>SPI's are monitored via the ISMS dashboard.</li> <li>Evaluations of actions and mitigations taken are made. (Examples "Evaluation Report Roadmap measure 17, Standardized ground handling procedures during adverse weather)</li> </ul>				
Conclusion				
The structure of safety meetings is comprehensive and the information to flow upward through all of these leading to the SRB, fully supports risk based, data driven decision making.				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
AMC1 ORO.GEN.200(a) (1) 'Management system' points (b), (c) and (d)	AMC1 ORA.GEN.200(a) (1) 'Management system' points (b), (c) and (d)	AMC1 ADR.OR.D.005(b)(1) 'Management system'	<p>Note; An air traffic services provider should be considered as complex unless it is eligible to apply for a limited certificate and fulfils the criteria set out in ATM/ANS.OR.A.010(a).</p> <p>AMC1 ATS.OR.200(1)(i) Safety management system</p> <p>AMC1 ATS.OR.200(1)(ii) Safety management system</p> <p>ACCOUNTABILITIES [complex ATS providers]</p> <p>AMC2 ATS.OR.200(1) (ii);(iii) Safety management system</p> <p>ORGANISATION AND ACCOUNTABILITIES [complex ATS providers]</p>	Not applicable

## I.4 Emergency Response - not in scope of Performance Audit

## I.5 SMS Documentation

### Annex 19 reference & text

1.5.1 The service provider shall develop and maintain an SMS manual that describes its:

- a) safety policy and objectives
- b) SMS requirements
- c) SMS processes and procedures
- d) accountability, responsibilities and authorities for SMS processes and procedures

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
The SMS documentation includes the policies and processes that describe the organisation's safety management system and processes.	See Annex 19 note	SMS documentation is consistent with other internal management systems and is representative of the actual processes in place. Changes to the SMS documentation are managed. Everyone has easy access to, familiar with and follow the relevant parts of the SMS documentation.	SMS Documentation is proactively reviewed for improvement

### Verification Examples

- The ISMS Manual has been tailored to the operation, fulfilling best practice and follows the ICAO Annex 19 principles.
- There are continuing updates to the ISMS Manual. (Current Version 3.0) and review criteria stated.
- Accountable Executives and managers are well versed in the ISMS Manual.
- Access to the manual was from the ISO but there was no apparent common system to share the documentation so access was suitable for the organisational set up but could be more open.
- Accountabilities, responsibilities and Terms of Reference are clear and comprehensive.
- Addition of a safety concern register.
- Training and Education description added.

### Conclusion

The ISMS Manual covers the requirements of the organisation and is demonstrably in use. A full review of the Manual was completed in July 2022. The manual goes beyond compliance to actively support the operating environment and has incorporated improvements over time to mature into a leading example of SMS documentation.

### Corresponding EU/EASA Requirements

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
AMC1 ORO.GEN.200(a)(5) 'Management system' point (a)	ORA.GEN.200 'Management system' point (a)(5)	ADR.OR.D.005 'Management system' point (c) and AMC1 ADR.OR.D.005(c) 'Management system', AMC2 ADR.OR.D.005(c) 'Management system'	ATM/ANS.OR.B.005(b) AMC1 ATM/ANS. OR.B.005(b) 'Management system' and Annex IV ATS. OR.200(1)(v)	AMC1 ATCO.OR.C.001(e) Management system of training organisations
AMC2 ORO.GEN.200(a)(5) - [complex operators]	AMC1 ORO.GEN.200(a)(5) 'Management system' point (a)  AMC1 ORO.GEN.200(a)(5)- [complex organisations]		AMC1 ATS.OR.200(1)(v) Safety management system	Point (e)(8)

Annex 19 Note: Depending on the size of the service provider and the complexity of its aviation products or services, the SMS manual and SMS operational records may be in the form of stand-alone documents or may be integrated with other organisational documents (or documentation) maintained by the service provider..

**Annex 19 reference & text**

1.5.2 The service provider shall develop and maintain SMS operational records as part of its SMS documentation.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
The SMS documentation defines the SMS outputs and which records of SMS activities will be stored.		SMS activities are appropriately stored and found to be complete and consistent with appropriate data protection and control.	SMS records are routinely used as inputs for safety management related tasks and continuous improvement of the SMS

**Verification Examples**

- The ISMS Manual details record control, including data protection. (ISMS Manual Section 5.4)
- There is a proactive use of databases and data feeds to the ISMS dashboard.
- ABL (State Aviation Occurrence Analysis Agency) is providing a reliable data source and enabling precursor events to be tracked within the ISMS dashboard.
- The evaluation against the roadmap continues to enhance the ISMS and an understanding of its effectiveness, this is included as an example of how safety records are used for improvement purposes.
- The ISMS dashboard visualizes database information against the identified Top 5 Flight and Ground risks.
- Procedure for document archiving added to ISMS Manual (Section 6)
- SPI's are set against Safety Ambitions and objectives.
- An innovative tool has been created with NLR to judge in what suitable timeframe a validation process should be performed on individual safety actions.

**Conclusion**

Management system records and data are protected and used. Databases are used proactively to manage risk, including innovative validation, making this area EFFECTIVE.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.220 'Record-keeping'	ORA.GEN.220 'Record-keeping'	ADR.OR.D.035 'Record keeping'	ATM/ANS.OR.B.030 Record keeping	ATCO.OR.C.020 Record keeping
AMC1 ORO.GEN.220(b) 'Record-keeping'	AMC1 ORA.GEN.220(b) 'Record-keeping'	AMC1 ADR.OR.D.035 'Record keeping'  AMC2 ADR.OR.D.035 'Record keeping'	ATS.OR.200(1)(v)  AMC2 ATS.OR.200(1) (v) Safety management system	AMC1 ATCO.OR.C.020(a);(b) Record keeping

## 2. Safety Risk Management

### 2.1 Hazard Identification

#### Annex 19 reference & text

2.1.1 The service provider shall develop and maintain a process to identify hazards associated with its aviation products or services. Hazard identification shall be based on a combination of reactive and proactive methods.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
There is a process that defines how reactive and proactive hazard identification is gathered from multiple sources (internal and external).		The hazards are identified and documented. Human and organisational Factors related hazards are being identified.	The organisation has a register of the hazards that is maintained and reviewed to ensure it remains up to date. It is continuously and proactively identifying hazards related to its activities and operational environment and involves all key personnel and appropriate stakeholders. Hazards are assessed in a systematic and timely manner

#### Verification Examples

- There is a well documented process in the ISMS Manual (section 3.2) which is in use.
- The system shows output with identified safety concerns sent to the Safety Concern Register for risk assessment.
- Examples of recent Hazard Identification; Ground Movement Hazard, Information Sheet Runway Incursions.
- The Standing Committees Ground & Flight conduct Hazard Identification (ISMS Manual Appendix D & E). Emergent risks are assessed. Ground Movement Risk area initiated.
- Joint Investigations results are assessed for a barrier effectiveness review.
- Bow-Tie analysis charts are used both reactively and proactively and therefore barrier effectiveness is challenged.
- SPI's monitoring precursor events
- Evaluation of Roadmap action effectiveness.

#### Conclusion

There are hazard identification methods in place and EFFECTIVE, pre-dominantly through safety reporting and management of change activities, and a process for analysing them; furthermore, there is statistical analysis of the available data being undertaken to prioritise hazards.

Procedures have been updated with a safety concerns process to initiate risk assessment events. The Ground Environment hazard identification has matured and a realization that there is an interface risk between Flight and Ground has led to the initiation of Ground Movement Risk area, demonstrating continuous improvement.

#### Corresponding EU/EASA Requirements

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 'Management system' point (a)(3)	ORA.GEN.200 'Management system' point (a)(3)	ADR.OR.D.005 'Management system' point (b)(3)	ATM/ANS.OR.B.005(a)(5) ATS.OR.200(2)(i)	ATCO.OR.C.001 Management system of training organisations point (c)
AMC1 ORO.GEN.200(a)(3) 'Management system' point (a)(1) - [complex operators]	AMC1 ORA.GEN.200(a)(3) 'Management system' point (a)(1) - [complex organisations]	AMC1 ADR.OR.D.005(b)(3) 'Management system'	AMC1 ATS.OR.205(b)(1) AMC2 ATS.OR.205(b)(1)	AMC1 ATCO.OR.C.001(c) 'Management system of training organisations'
AMC1 ORO.GEN.200(a)(1);(2);(3);(5) 'Management system' points (a), (b) and (d) - [non-complex operators]	AMC1 ORA.GEN.200(a)(1);(2);(3);(5) 'Management system' points (a), (b) and (d) - [non-complex organisations]			

2.1.2 Regulation (EU) 376/2014 and Annex 19 Appendix 2 Std. 1.1.1.c) safety reporting procedures				
PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE	
<p>There is a confidential reporting system to capture mandatory occurrences and voluntary reports that includes a feedback system and stored on a database.</p> <p>Responsibilities have been defined as required by Reg. (EU) 376/2014.</p> <p>The process identifies how reports are actioned and timescales specified.</p>		<p>The reporting system is simple to use, being used and accessible to all personnel.</p> <p>There is feedback to the reporter of any actions taken (or not taken) and, where appropriate, to the rest of the organisation.</p> <p>Reports are evaluated, processed, analysed and stored.</p> <p>People are aware and fulfil their responsibilities in respect of the reporting system</p> <p>Reports are processed within the defined timescales.</p>	<p>There is a healthy reporting system based on the volume of reporting and the quality of reports received.</p> <p>Safety reports are acted on in a timely manner</p> <p>Personnel express confidence and trust in the organisations reporting policy and process.</p> <p>The reporting system is being used to make better management decision making and continuous improvement</p> <p>The reporting system is available for third parties to report (partners, suppliers, contractors).</p>	
Verification Examples				
<ul style="list-style-type: none"> <li>• Each separate organisation has their own reporting system from which issues are fed into the ISMS.</li> <li>• Ground Handling has been highlighted as an area of focus from the results of report analysis.</li> <li>• The State Aviation Occurrence Analysis Agency (ABL) provides reliable reporting data input into the ISMS dashboard. Use of ABL data ensures de-identified, common source material.</li> <li>• Mapping of reported precursor events (Threats) and links to occurrences (undesired outcomes) has been achieved with ABL and included on the ISMS dashboard.</li> <li>• There are additional signees to the Non-Disclosure Agreement (NDA) between ISMS partners to enable open reporting and investigation of events, which has enhanced reporting culture and cooperation.</li> </ul>				
Conclusion				
<p>The handling of safety reports is EFFECTIVE for the needs of the ISMS organisation with reports primarily being handled within individual organisations. There is no common system (or requirement for one) but the NDA enables effective cooperation and investigation. The continued communication with ABL and the proactive use of precursor information continues to be developed in the dashboard. Feedback to ABL as to how data is currently used and future requirements will be essential in maintaining this relationship. Continuing development with ABL to ensure information is used effectively in safety improvements. As a common reporting system is not required the context of this marker was reconsidered, which enabled the possibility of a higher score.</p>				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
Regulation (EU) 376/2014 Article 4 'Mandatory reporting', Article 5 'Voluntary reporting', Article 13 'Occurrence analysis and follow-up at national level', Article 16 'Protection of the information source'.				

## 2.2 Risk Assessment and Mitigation

### Annex 19 reference & text

2.2.1 The service provider shall develop and maintain a process that ensures **analysis, assessment** [and control] of the safety risks associated with identified hazards. Annex 19 Note: *The process may include predictive methods of safety data analysis.*

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
There is a process for the analysis and assessment of safety risks. The level of risk the organisation is willing to accept is defined.		Risk analysis and assessments are carried out in a consistent manner based on the defined process.  The defined risk acceptability is being applied.	Risk analysis and assessments are reviewed for consistency and to identify improvements in the processes. Risk assessments are regularly reviewed to ensure they remain current.  Risk acceptability criteria are used routinely and applied in management decision making processes and are regularly reviewed.

### Verification Examples

- There is a clearly defined and comprehensive process within the ISMS Manual (section 3.3)
- Risks are assessed at a CRM Workshop initiated by the Core Team and facilitated by Safety Experts or external contractors such as the NLR (National Aerospace Laboratory).
- At the CRM Workshop (observed during previous Audit) subject matter experts from each organisation assess the risk against their own criteria and tolerability before then plotting on the Common Risk Matrix for recommendation to the TOP SAG for decision as to tolerability from a ISMS perspective. These Risk Workshops continue.
- The Top 5 Risks for Flight and Ground are defined and reviewed. These remain:
  - Flight
    - Loss of Control during take off
    - Loss of Control during landing flare
    - Loss of separation in flight while under ATC control
    - Bird Strike
    - Runway incursion
  - Ground
    - Damage caused to an aircraft during ground handling
    - Damage and injuries caused by collisions on service roads and stands
    - Injuries due to falls from height on aircraft stand
    - Damage and injuries caused during aircraft docking
    - Injuries due to slips, trips, entrapment or electrocution at aircraft stand
- The Top Risks will be reviewed for suitability (may not remain 5 in number) and the risk area Ground Movement added.
- The Common Risk Assessment methodology has been formally adopted.
- There is a continued focus on threat lines (Precursors) to risk.
- The Barrier Status function in the dashboard is yet to be fully implemented but shows progression.
- There has been an external NLR review of the Risk Assessment Process.

### Conclusion

There are examples of good risk assessment processes and behaviours in evidence; indeed, the acceptance and knowledge of risk principles by the management team was particularly notable. The methodology of how risk is assessed for a combined organisation is innovative and functions well.  
There is demonstrable control of hazards, risk acceptability criteria are reviewed for consistency and the ISMS members are challenging themselves regarding risk handling. Maturity continues to be demonstrated.

Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 'Management system' point (a)(3)	ORA.GEN.200 'Management system' point (a)(3)	ADR.OR.D.005 'Management system' point (b)(4) and AMC1 ADR.OR.D.005(b)(4) 'Management system'	ATS.OR.200(2)(i)	ATCO.OR.C.001 'Management system of training organisations' point (c)  AMC1 ATCO.OR.C.001(c) 'Management system of training organisations'
AMC1 ORO.GEN.200(a)(3) 'Management system' point (b)(1) - [complex operators]	AMC1 ORA.GEN.200(a)(3) 'Management system' point (b)(1) - [complex organisations]			
AMC1 ORO.GEN.200(a)(1);(2);(3);(5) 'Management system' points (a), (b) and (d) - [non-complex operators]	AMC1 ORA.GEN.200(a)(1);(2);(3);(5) 'Management system' points (a), (b) and (d) - [non-complex organisations]			

**Annex 19 reference & text**

2.2.2 The service provider shall develop and maintain a process that ensures [analysis, assessment and] **control** of the safety risks associated with identified hazards.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
The organisation has a process in place to decide and apply the appropriate risk controls.		Appropriate risk controls are being applied to reduce the risk to an acceptable level including timelines and allocation of responsibilities.  Human Factors are considered as part of the development of risk controls	Risk controls are practical and sustainable and applied in a timely manner and do not create additional risks.  Risk Controls take into consideration Human Factors.

**Verification Examples**

- Risk controls have been initiated and their effectiveness evaluated (Example Evaluation of Standardized ground handling procedures during adverse weather).
- Risk Reduction methods are detailed in the ISMS Manual (Section 3.4)
- Risk Reduction method implementation is detailed in the ISMS Manual (Section 3.5)
- There is recognition of dynamic and emerging risks and assessment of the time and effort required for effective risk control.

**Conclusion**

There are controls in place, a system to support implementation and assurance evaluations. The joint nature of the ISMS means that the risk control is potentially "owned" by one (or few, not all) partner(s) this means that the cooperation and commitment to the ISMS is paramount to success, which there is continuing evidence of with Core Team Monitoring and informing TOPSAG for decision making.  
The Risk Reduction and Implementation methodology is mature and a leading example.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
AMC1 ORO.GEN.200(a)(3) 'Management system' point (b)	AMC1 ORA.GEN.200(a)(3) 'Management system' point (b)	AMC1 ADR.OR.D.005(b)(4) 'Management system'	ATS.OR.200(2)(i)	ATCO.AR.B.001 Management system, (a)(4);  Furthermore, ATSP provisions apply.

### 3. Safety Assurance

#### 3.1 Safety Performance Monitoring and Measurement

**Annex 19 reference & text**

3.1.1 The service provider shall develop and maintain the means to verify the safety performance of the organisation and to validate the effectiveness of safety risk controls.

See Annex 19 Note.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
There is a process in place to assess whether the risk controls are applied and effective.		Risk controls are being verified to assess whether they are applied and effective.	Risk controls are assessed and actions taken to ensure they are effective and delivering a safe service.  The reasons for ineffectiveness of risk controls are investigated.

**Verification Examples**

- Performance measures on risk controls are defined, including verification of implementation and validation of effectiveness evaluated. ISMS Manual (Section 3.6)
- There have been effectiveness of control evaluations such as the “status update mitigating measures on risk of pushback collisions” the “standardizes ground handling procedures in adverse weather”. In the latter, the validation check showed that the procedure did not work as intended and required further mitigation, demonstrating effectiveness and necessity of the procedure.
- Safety Performance Indicators (SPIs) include all the Top 5 Risks Flight & Ground and monitor safety performance.
- Effectiveness of risk controls is documented and discussed in several meetings, including SRB and TOP SAG.
- A review of the Roadmap actions takes place regularly.

**Conclusion**

The effectiveness of controls are evaluated and discussed in the Safety meeting forums to ensure a safe service and are actively followed up on. Safety Performance is monitored and actions taken.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 ‘Management system’ point (a)(3)  AMC1 ORO.GEN.200(a)(3) ‘Management system’ point (d)(1) - [complex operators]	ORA.GEN.200 ‘Management system’ point (a)(3)  AMC1 ORO.GEN.200(a)(3) ‘Management system’ point (d)(1) - [complex organisations]	ADR.OR.D.005 ‘Management system’ point (b)(5) and AMC1 ADR.OR.D.005(b)(5) ‘Management system’	ATS.OR.200 (3)(i)	Not applicable, however Air Traffic Service Provider provisions apply.

Annex 19 Note: An internal audit process is one means to monitor compliance with safety regulations, the foundation upon which SMS is built, and assess the effectiveness of these safety risk controls and the SMS. Guidance on the scope of the internal audit process is contained in the Safety Management Manual (SMM) (Doc 9859).

Annex 19 reference & text				
3.1.2 The service provider's safety performance shall be verified in reference to the safety performance indicators and safety performance targets of the SMS in support of the organisation's safety objectives.				
PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE	
There is a process in place on how the safety performance of the organisation will be measured including safety performance indicators and targets linked to the organisation's safety objectives.		The safety performance of the organisation is being measured and the SPIs are being continuously monitored and analysed for trends.	<p>SPIs are demonstrating the safety performance of the organisation and the effectiveness of risk controls based on reliable data.</p> <p>SPIs are reviewed and regularly updated to ensure they remain relevant.</p> <p>Where the SPIs indicate a risk control not being effective appropriate action is taken.</p>	
Verification Examples				
<ul style="list-style-type: none"> <li>• Safety Performance indicators and targets have been set against the documented Safety Objectives (ISMS Manual Appendix L)</li> <li>• The Safety dashboard visualizes SPIs against the Top 5 Risks Flight &amp; Ground with Threats (Precursor), Key Barrier Controls (partially in place, under development) and Consequences, enabling a proactive approach to monitor the risk reduction progress.</li> <li>• Effectiveness of Risk Controls are monitored.</li> <li>• A new tool is used to assess when is a suitable significant time to validate risk controls or safety actions.</li> <li>• There is an implemented process for Reassessing safety objectives and ambitions and how this performance is monitored. (ISMS Manual section 4.2.2)</li> </ul>				
Conclusion				
Safety Performance is monitored and verified by an EFFECTIVE methodology and can be seen demonstrated at several levels from the ISMS dashboard through a series of safety meetings to the Accountable Executives at SRB. The visibility of safety performance enables risk based, data driven decision making.				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
<p>ORO.GEN.200 'Management system' point (a)(3)</p> <p>AMC1 ORO.GEN.200(a)(3) 'Management system' point (d)(1) - [complex operators]</p>	<p>ORA.GEN.200 'Management system' point (a)(3)</p> <p>AMC1 ORO.GEN.200(a)(3) 'Management system' point (d)(1) - [complex organisations]</p>	<p>ADR.OR.D.005 'Management system' point (b)(5) and AMC1 ADR.OR.D.005(b)(5) 'Management system'</p>	<p>ATM/ANS.OR.B.005(a)(3)</p> <p>AMC2 ATM/ANS.OR.B.005(a)(3) Management system</p> <p>AMC1 ATS.OR.200(1)(v) Safety management system</p>	<p>Not applicable, however Air Traffic Service Provider provisions apply.</p>

## 3.2 The Management of Change

### Annex 19 reference & text

3.2.1 The service provider shall develop and maintain a process to identify changes which may affect the level of safety risk associated with its aviation products or services and to identify and manage the safety risks that may arise from those changes.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
The organisation has established a management of change process to identify whether changes have an impact on safety and to manage any identified risks in accordance with existing safety risk management processes.		The management of change process is being used. It includes hazard identification and risk assessments with appropriate risk controls being put in place before the decision to make the change is taken.  Human Factors issues have been considered and being addressed as part of the change management process.	The management of change process is used for all safety related changes including Human Factors issues and considers the accumulation of multiple changes. It is initiated in a planned, timely and consistent manner and includes follow up action that the change was implemented safely.

### Verification Examples

- Interviewed SRB and TOPSAG members discussed examples of the process in use.
- Planned changes are assessed for safety risk and checked through SRB.
- The Management of Change process is well documented and in use.
- The Safety Concern process includes identifying changes on interfaces between ISMS partners. (ISMS Manual 3.2.2)
- The ToRs of the TOPSAG include initiating Risk Analysis on changes (Management of Change). (ISMS Manual Appendix F)
- Examples “Risk Assessment landing distance available RWY06 during Maintenance”, TOPSAG 20-04-2022. “Ramp up Safety Effects” TOPSAG 03-03-2021.
- There has been a recent review (Oct 22) of the ISMS Management of Change process to improve clarity of MoC criteria of initiation within ISMS.

### Conclusion

The awareness of when a Management of Change process is required is good and the process is mature. The accumulation of multiple changes is considered and there is an evaluation that the change was implemented safely. The process continues to mature.

### Corresponding EU/EASA Requirements

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 'Management system' point (a)(3)	ORA.GEN.200 'Management system' point (a)(3)	ADR.OR.D.005 'Management system' point (b)(6) and AMC1 ADR.OR.D.005(b)(6)	ATM/ANS.OR.A.040 Changes — general	AMC1 ATCO.OR.C.001(e) Management system of training organisations point (c)
AMC1 ORO.GEN.200(a)(3) 'Management system' point (e) - [complex operators]	AMC1 ORA.GEN.200(a)(3) 'Management system' point (e) - [complex organisations]	ADR.OR.B.040 'Changes' in particular point (f)	ATM/ANS.OR.A.045 Changes to a functional system	
AMC1 ORO.GEN.200(a)(1);(2);(3);(5) 'Management system' point (b) - [non-complex operators]	AMC1 ORA.GEN.200(a)(1);(2);(3);(5) 'Management system' point (b) - [non-complex organisations]		ATM/ANS.OR.B.005(a)(4)  ATM/ANS.OR.B.010 Changes - General	
			ATS.OR.205 Safety assessment and assurance of changes to the functional system ATS. OR.210 Safety criteria	

### 3.3 Continuous Improvement of the SMS

**Annex 19 reference & text**

3.3.1 The service provider shall monitor and assess its SMS processes to maintain or continuously improve the overall effectiveness of the SMS.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
There is a process in place to monitor and review the effectiveness of the SMS using the available data and information.		There is evidence of the SMS being periodically reviewed to support the assessment of its effectiveness and appropriate action being taken.	The assessment of SMS effectiveness uses multiple sources of information including the safety data analysis that supports decisions for continuous improvements.

**Verification Examples**

- The requirement to continuously improve the Management System is documented in the ISMS Manual (Section 4.4)
- This Performance Assessment is part of a cycle of continuous improvement, this being the third such assessment and improvement has been demonstrated each time.
- The Schiphol Safety Improvement Covenant gives mandate for further development of the ISMS.
- The Roadmap progress is evaluated annually.
- The implementation of a new focus area “Ground Movements” to meet a perceived potential problem area.
- Demonstrable improvement in output and maturity of system elements.
- There has been a full review and major new version of the ISMS Manual (currently Version 3.0) including TORs for Taskforces & Core Team, Procedure for document archiving, explicit description of the ISMS organisation, Safety Concern register added, Hazard Identification and Roadmap process incorporated into Safety Risk Management Process, Process for safety performance monitoring, Information regarding training, education and safety communication added.

**Conclusion**

This PA is designed to show the current maturity on the PSOE scale which can then be reassessed to demonstrate the progress and effectiveness of management system development. There have been demonstrable improvements since the two previous assessments (2019 & 2020) and the use of safety data analysis is directing safety improvements and the Schiphol Roadmap.

**Corresponding EU/EASA Requirements**

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
Reg. 216/2008 Essential requirements for air operations point 8.a.4 ORO.GEN.200 ‘Management system’ point (a)(3) and (a)(6) AMC1 ORO.GEN.200(a)(3) ‘Management system’ point (f) - [complex operators] AMC1 ORO.GEN.200(a)(1);(2);(3);(5) ‘Management system’ point (e) - [non-complex operators]	Reg. 216/2008 Essential requirements for pilot licensing point 3.a.1(ii) for ATOs and 4.c.1(ii) for AeMCs ORA.GEN.200 ‘Management system’ point (a)(3) and (a)(6) AMC1 ORO.GEN.200(a)(3) ‘Management system’ point (f) - [complex organisations] AMC1 ORO.GEN.200(a)(1);(2);(3);(5) ‘Management system’ point (e) - [non-complex organisations]	ADR.OR.D.005 ‘Management system’ point (b)(7) and AMC1 ADR.OR.D.005(b)(7) ‘Management system’	ATS.OR.200(2)(iii)	AMC1 ATCO.OR.C.001(e) Management system of training organisations point (b)

## 4. Safety Promotion

### 4.1 Training and Education

#### Annex 19 reference & text

4.1.1 The service provider shall develop and maintain a safety training programme that ensures that personnel are trained and competent to perform their SMS duties.

The scope of the safety training programme shall be appropriate to each individual's involvement in the SMS.

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
There is a training programme for SMS in place that includes initial and recurrent training. The training covers individual safety duties (including roles, responsibilities and accountabilities) and how the organisation's SMS operates.		The SMS training programme is delivering appropriate training to the different staff in the organisation and being delivered by competent personnel.	SMS Training is evaluated for all aspects (learning objectives, content, teaching methods and styles, tests) and is linked to the competency assessment.  Training is routinely reviewed to take into consideration feedback from different sources.

#### Verification Examples

- The individual partners each have their own training programmes and there are clear Skills and Qualities required of the ISMS team members defined to ensure that competent staff are involved.
- The Integral Safety Office staff have had a Training Programme and this is evaluated and reviewed.
- A Competence Scheme and development programme for Programme Director ISO has been added.

#### Conclusion

The competence requirements are in place for the ISO staff who are at the core of the ISMS and there now is a safety training programme implemented, delivering appropriate training. This is now EFFECTIVE, as the training programme output has been reviewed and evaluated.

#### Corresponding EU/EASA Requirements

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 'Management system' point (a)(4)	ORA.GEN.200 'Management system' point (a)(4)	ADR.OR.D.005 'Management system' (b)(8) and AMC1 ADR.OR.D.005(b)(8)	ATM/ANS.OR.B.005(a)(6) Annex IV ATS.OR.200 'Safety management system' (4)(i)	ATCO.OR.C.001 'Management system for training organisation', point (d)
AMC1 ORO.GEN.200(a)(4) 'Management system' point (a)	AMC1 ORA.GEN.200(a)(4) 'Management system' point (a)			

4.1.2 EASA reference				
EASA ORX.GEN.200(a)(4) requirements for maintaining personnel trained and competent to perform their safety and compliance tasks				
<b>PRESENT</b>	<b>SUITABLE</b>	<b>OPERATIONAL</b>		<b>EFFECTIVE</b>
There is a process in place to ensure that the organisation has trained and competent personnel.		There is evidence of the process being used and being recorded.		The competency assessment programme takes appropriate remedial action when necessary and feeds into the training programme.
<b>Verification Examples</b>				
<ul style="list-style-type: none"> <li>Specifically relevant to the Integral Safety Office.</li> <li>The Skills and Qualities required of SRB, TOPSAG, and the Flight &amp; Ground Standing Committees are described in the ISMS Manual Appendices.</li> <li>A Competence Scheme for ISO is available in the ISMS Manual (Section 2.4.8).</li> <li>A Competence Scheme and development programme for Programme Director ISO has been added.</li> <li>Feedback from training course which did not meet aims led to refund and alternate source used.</li> </ul>				
<b>Conclusion</b>				
There are descriptions of the Skills and Qualities required of the management team members within the ISMS and descriptions of the ISO competences and training are in place. The process is in use, being recorded and remedial actions taken therefore EFFECTIVE.				
<b>Corresponding EU/EASA Requirements</b>				
<b>Air Operations</b>	<b>Aircrew</b>	<b>Aerodromes</b>	<b>ATM/ANS</b>	<b>ATCO Training Organisations</b>
ORO.GEN.200 'Management system' point (a)(4) AMC1 ORO.GEN.200(a)(4) 'Management system' point (a)	ORA.GEN.200 'Management system' point (a)(4) AMC1 ORA.GEN.200(a)(4) 'Management system' point (a)	ADR.OR.D.005 'Management system' (b)(8) and AMC1 ADR.OR.D.005(b)(8)	ATM/ANS.OR.B.005(a)(6) Annex IV ATS.OR.200 'Safety management system' (4)(i))	AMC1 ATCO.OR.C.001(d) Management system of training organisations PERSONNEL

## 4.2 Safety Communication

### Annex 19 reference & text

4.2.1 The service provider shall develop and maintain a formal means for safety communication that:

- ensures personnel are aware of the SMS to a degree commensurate with their positions
- conveys safety-critical information
- explains why particular actions are taken to improve safety; and
- explains why safety procedures are introduced or changed

See also Reg. (EU) 376/2014 (Article 13(3))

PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE
There is a process to determine what safety critical information needs to be communicated and how it is communicated throughout the organisation to all personnel as relevant. This includes contracted organisations and personnel where appropriate.		Safety critical information is being identified and communicated throughout the organisation to all personnel as relevant including contracted organisations and personnel where appropriate.	The organisation analyses and communicates safety critical information effectively through a variety of methods as appropriate to maximise it being understood.  Safety communication is assessed to determine how it is being used and understood and to improve it where appropriate.

### Verification Examples

- The ISMS has the objective to share safety information, also to and from external parties, and create awareness of safety risks at Schiphol. The communication on safety is not limited to specific safety magazines or newsletters; it is also applicable to, for example, meetings, training sessions, manuals, procedures and feedback to employees.
- There has been a section (5.3) Safety Communication, added to the ISMS Manual.
- The following safety promotion objectives are identified:
  - To raise awareness about interface safety risks at Schiphol;
  - To raise awareness about the way behaviour of staff impacts safety;
  - To improve working relations between ISMS sector partners
- The ISMS is involved in Schiphol Safety Day.
- The Dashboard provides an overview of safety performance across different elements which has increased understanding amongst the partners.
- There are numerous reports generated by and for the ISMS to communicate safety critical information.
- It is recognized that safety communication is an explicit part of risk reduction measures.

### Conclusion

There are numerous examples of safety communication output that demonstrates that it is EFFECTIVE.

Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 'Management system' point (a)(4)	ORA.GEN.200 'Management system' point (a)(4)	ADR.OR.D.005 'Management system' point (b)(9) and AMC1 ADR.OR.D.005(b)(9)	ATM/ANS.OR.B.005(a)(7) ATS.OR.200(4)(ii)	Not applicable, however Air Traffic Service Provider provisions apply.
ORO.GEN.200 'Management system' point (a)(5)	ORA.GEN.200 'Management system' point (a)(5)	ADR.OR.D.005(b)(9) 'Management system'	AMC1 ATM/ ANS.OR.B.005(a) (7) Management system	
AMC1 ORO.GEN.200(a) (4) 'Management system' point (b)	AMC1 ORA.GEN.200(a) (4) 'Management system' point (b)			

## 5. Additional Items to be Considered

These additional items included for the assessment relate to EASA Management System requirements or new notes in Annex 19 Edition 2. They are considered important parts of an effective SMS.

### 5.1 Interface Management

Annex 19 reference & text				
5.1.1 Appendix 2 Note 2.—				
The service provider’s interfaces with other organisations can have a significant contribution to the safety of its products or services.				
PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE	
The organisation has identified and documented the relevant internal and external interfaces and the critical nature of such interfaces.		The organisation is managing the interfaces through hazard identification and risk management. There is assurance activity to assess risk mitigations being delivered by external organisations.	<p>The organisation has a good understanding of interface management and there is evidence that interface risks are being identified and acted upon.</p> <p>Interfacing organisations are sharing safety information and take actions when needed.</p>	
Verification				
<ul style="list-style-type: none"> <li>The reason for the ISMS’ existence is to provide management of risk across the interfaces of the partner organisations and within this context it is EFFECTIVE with a functioning system that is providing demonstrable output and facilitating interface risk to be acted upon.</li> <li>A Non-Disclosure Agreement is in place for safety information sharing between partners.</li> <li>There is evidence of Effective Risk Management taking place.</li> <li>Actions are not only taken but verified and validated.</li> <li>A reliable data feed is in place from ABL to feed the ISMS dashboard.</li> <li>A new focus area has been initiated “Ground Movement” to better manage the risks around pushback and ramp movements.</li> <li>There is a recognized disparity of safety management system maturity amongst sector parties with Ground Handling being identified as an area for improvement. That this is identified and could be approached with fact based analysis from the ISMS has enabled an environment for improvements to be undertaken in a more collaborative manner.</li> </ul>				
Conclusion				
There is a high degree of involvement from all the partners in making the ISMS work across the risk interfaces, this also enhances cooperation and understanding. The ISMS is mature and effective output being demonstrated, making this truly industry leading in the way interface management between multiple partners is conducted.				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
Not explicitly addressed See ORO.GEN.205 ‘Contracted activities’ and related GM1 & 2	Not explicitly addressed See ORA.GEN.205 ‘Contracted activities’ and related GM1 & 2	ADR.OR.D.010 ‘Contracted activities’ and ADR.OR.D.025 ‘Coordination with other organisations’	ATM/ANS.OR.B.005 ‘Management system’ point (f)  GM1 ADR.OR.B.040(f) ‘Changes’ points (b)(2) and (b)(3)	Not explicitly addressed

## 5.2 Responsibilities for Compliance and Compliance Monitoring Function

5.2.1 Responsibilities and accountability for ensuring compliance are defined				
PRESENT	SUITABLE	OPERATIONAL		EFFECTIVE
Applicable requirements are clearly identified and properly transcribed into organisation manuals and procedures. Responsibilities and accountabilities for compliance are defined for all staff.		Organisation manuals and procedures are regularly reviewed in light of changes in applicable requirements.  All staff are aware of their responsibilities and accountabilities for compliance and to follow processes and procedures.	Enhancements to processes and procedures are suggested from the workforce and management. Individuals are proactively identifying and reporting potential non-compliances.	
Verification Examples				
<ul style="list-style-type: none"> <li>There is no specific regulation or requirement for an organisation such as the ISMS which is on top of the individual partners requirements for a Management System.</li> <li>The Schiphol Safety Improvement Covenant provides the mandate for the ISMS.</li> </ul>				
Conclusion				
Not applicable and not included in overall assessment scoring.				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.205 'Personnel requirements' point (b)	ORA.GEN.205 'Personnel requirements' point (b)	ADR.OR.D.005 'Management system' point (b)(11)	ATM/ANS.OR.B.020 Personnel requirements	ATCO.OR.C.010 Personnel requirements, point (b)

5.2.2 Responsibilities and accountabilities for compliance monitoring are defined				
PRESENT	SUITABLE	OPERATIONAL		EFFECTIVE
<p>It has been documented that there is a person or group of persons with responsibilities for compliance monitoring including the person acting as compliance monitoring manager with direct access to the accountable manager.</p> <p>The accountable manager's accountability and responsibilities for compliance monitoring is documented.</p>		<p>The compliance monitoring manager has implemented and is maintaining a compliance monitoring programme</p> <p>The accountable manager is ensuring there are sufficient compliance monitoring resources and independence of the audit function is being maintained.</p>	<p>The organisation has established a method to assess the efficiency and effectiveness of the compliance monitoring activities with feedback to the accountable manager.</p> <p>The accountable manager and senior management actively seek feedback on the status of compliance monitoring activities.</p>	
Verification Examples				
<ul style="list-style-type: none"> <li>• There is no defined compliance accountability or responsibility.</li> <li>• There is no regulation to be compliant to.</li> </ul>				
Conclusion				
<p>Not applicable and not included in overall assessment scoring. An internal check of compliance against the ISMS Manual currently now in place.</p>				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
AMC1 ORO. GEN.200(a)(6) 'Management system' point (c)	AMC1 ORA.GEN.200(a)(6) 'Management system' point (c)	AMC1 ADR.OR.D.005(b) (11) Management system point (b) and AMC2 ADR.OR.D.005(b) (11) Management system	AMC1 ATM/ANS. OR.B.005(c) Management system  COMPLIANCE MONITORING	AMC2 ATCO.OR.C.001(f) Management system of training organisations  COMPLIANCE MONITORING

5.2.3 Compliance monitoring programme				
PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE	
<p>The organisation has a compliance monitoring programme including details of the schedule of monitoring activities and procedures for audits and inspections, reporting, follow up and records.</p> <p>The way independence of compliance monitoring is achieved is documented.</p>		<p>The compliance monitoring programme is being followed and regularly reviewed.</p> <p>This includes the modification of the programme to address identified risks or organisational and operational changes.</p> <p>Compliance monitoring is independent from operational activities and includes contracted activities</p>	<p>The organisation regularly reviews its compliance monitoring programme and procedures to identify the need for changes and to ensure they remain effective.</p>	
Verification Examples				
<ul style="list-style-type: none"> <li>• There is now a Joint Internal Audit in place (ISMS Manual 3.4.1) for an annual audit by ISMS partners auditors.</li> <li>• An External audit using this MSAT Tool, will be conducted every 3 years by the National Authority (ILT) or a suitable consultant (such as a Baines Simmons Performance Assessment)</li> <li>• Although there is no requirement for the ISMS to comply to, the partner organisations and their SMS's must monitor their interfaces as in the relevant requirements stated below and therefore must monitor the ISMS.</li> </ul>				
Conclusion				
<p>Now partially applicable but not included in overall assessment scoring, as not assessed in previous assessments. An internal check of compliance against the ISMS Manual is now in place.</p>				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
<p>AMC1 ORO.GEN.200(a) (6) 'Management system' Point (d)(2) (vi)</p> <p>GM2 ORO.GEN.200(a)(6) 'Management system' [complex organisations]</p> <p>GM3 ORO.GEN.200(a) (6) 'Management system' [non-complex organisations]</p>	<p>AMC1 ORO.GEN.200(a) (6) 'Management system' Point (d)(2) (vi)</p>	<p>AMC1 ADR.OR.D.005(b) (11) Management system point (c)(2)(vi)</p>	<p>AMC1 ATM/ANS.OR.B.005 (c) Management system</p> <p>COMPLIANCE MONITORING</p>	<p>GM1 ATCO.OR.C.001(f) 'Management system of training organisations' point (c)(2)(vi)</p>

5.2.4 Compliance monitoring outcomes e.g. audit results including corrective and preventive actions follow-up.				
PRESENT	SUITABLE	OPERATIONAL	EFFECTIVE	
<p>The organisation has documented procedures for the identification and follow-up of corrective actions and preventive actions.</p> <p>There is a process for how audit results are communicated to the accountable manager and senior management.</p> <p>The interface between compliance monitoring and the safety risk management processes is described.</p>		<p>The identifying and follow-up of corrective and preventive actions is carried out in accordance with the procedures including causal analysis to address root causes.</p> <p>The status of corrective and preventive actions is regularly communicated to relevant senior management and staff.</p>	<p>The organisation regularly reviews the status of corrective and preventive actions.</p> <p>The organisation investigates the systemic causes and contributing factors of findings.</p> <p>Significant findings are used in internal safety training &amp; safety promotion sessions.</p> <p>The audit results and root causes, causal and contributing factors are analysed and considered when reviewing internal policies and procedures.</p> <p>There is regular communication between compliance monitoring staff and staff involved in other SMS activities.</p>	
Verification Examples				
<ul style="list-style-type: none"> <li>• There has been one internal audit completed in 2022 as a pilot scheme, with a report issued.</li> <li>• The follow up of corrective and preventative actions from this first audit will enable further assessment of this point.</li> </ul>				
Conclusion				
<p>Now partially applicable but not included in overall assessment scoring, as not assessed in previous assessments. An internal check of compliance against the ISMS Manual is now in place.</p>				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 'Management system' point (a)(6)	ORA.GEN.200 'Management system' point (a)(6)	AMC1 ADR.OR.D.005(b) (11) 'Management system' point (a)(1) points (b) and (e)	AMC1 ATM/ANS.OR.B.005(c) Management system COMPLIANCE MONITORING	ATCO.OR.C.001 'Management system of training organisations' point (f)

## D. Recommendations

As concluded in the Executive Summary and indicated by the performance indicators, Schiphol ISMS has a Low EFFECTIVE management system for controlling operational risk. Recommendations were outside of the scope of this assessment. In our experience, to achieve lasting success, a safety improvement plan should follow the Understand, Build, Power-up, Perform model, with this report demonstrating where on that journey the ISMS is currently; with the improvements made since the last assessment and the consolidation of the other elements the ISMS is well into the Power-up phase and has several indicators that Perform.



*Figure 4: Implementation Phases*

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