

Safety Management Performance Assessment 2020

Schiphol ISMS Report



September 2020

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Project Management

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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 September 2020 during the Covid-19 pandemic therefore, as ISMS staff were, in the majority, working from home and international travel for consultants was restricted, the interview phase was conducted remotely using MS Teams. This has rapidly become the 'new normal' over the previous months and it is assessed that there was no perceived loss in interview and subsequent analysis quality. In addition, a remote document review was also conducted.

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 2 Years and during this period has concentrated on developing and implementing the Management System, elements of which are starting to show maturity. The ISMS project was initiated 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 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

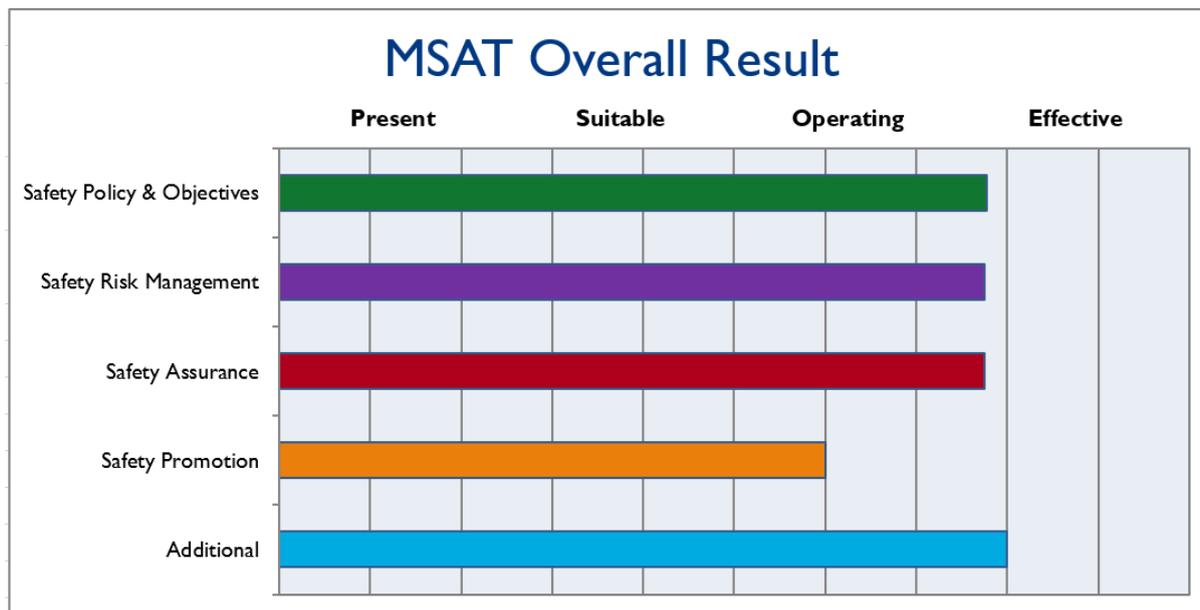
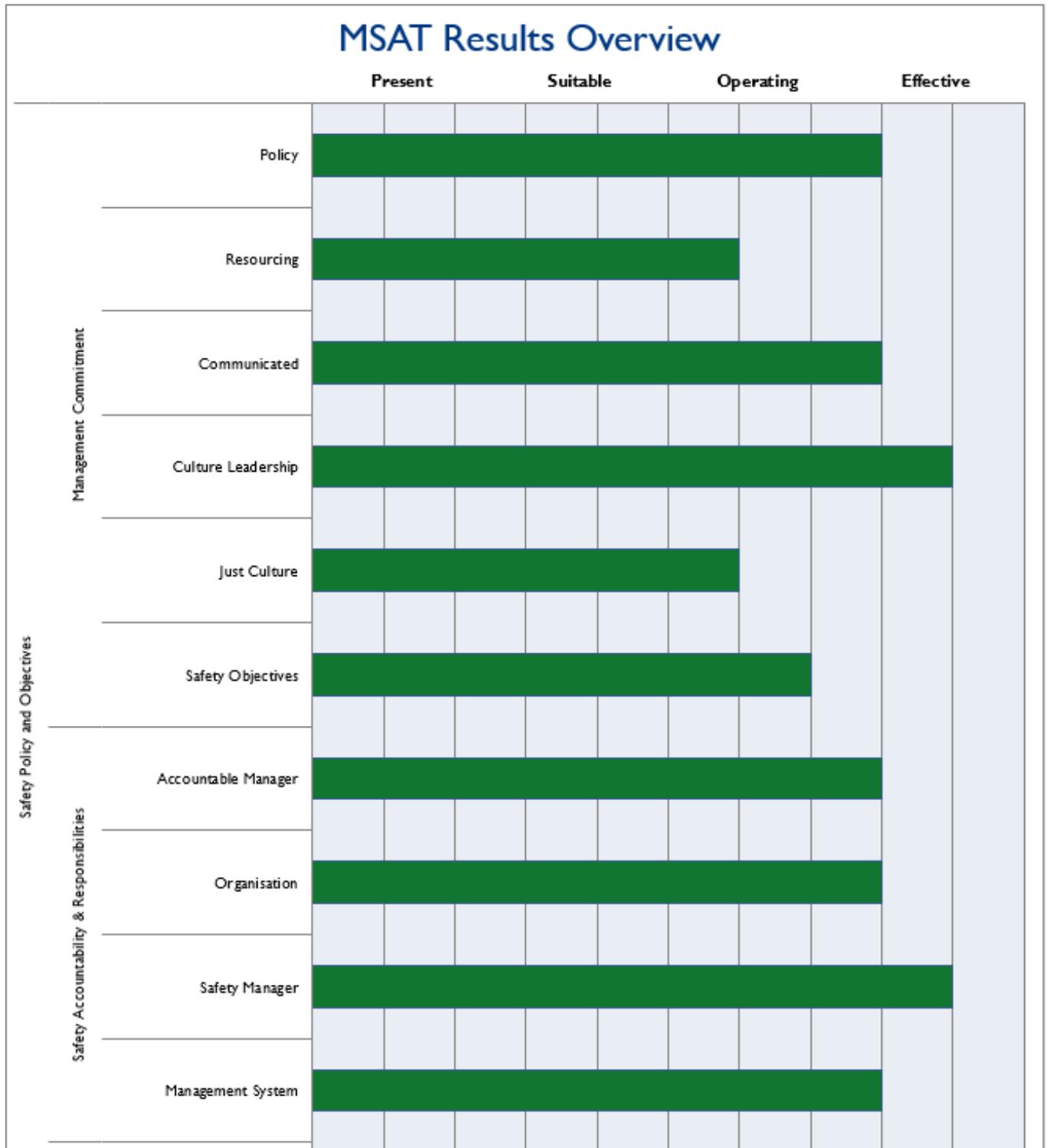


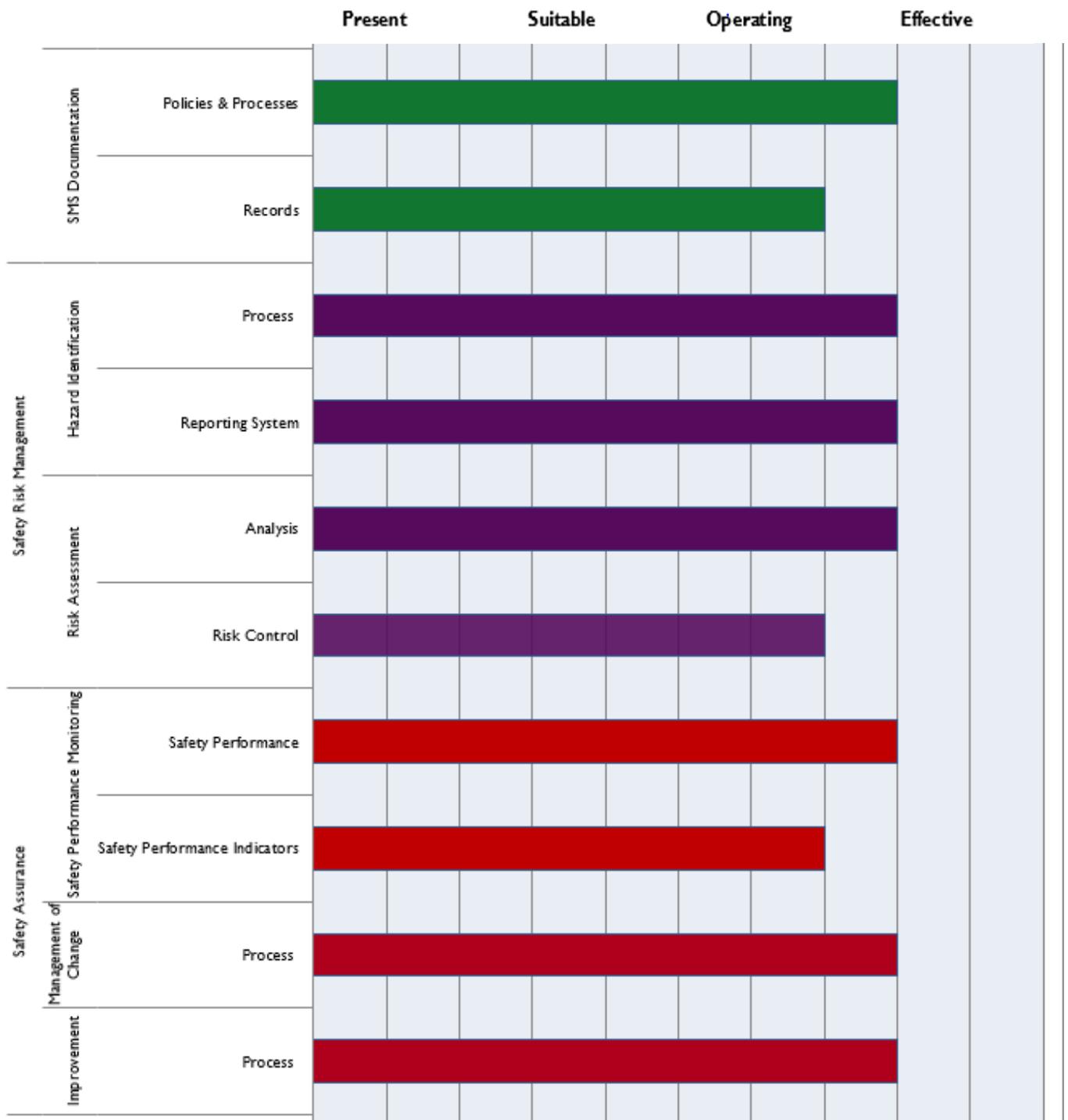
Figure 1: Overall Assessment

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 High OPERATING*, which is above the global aviation industry average assessed by Baines Simmons of high SUITABLE, with 31 assessments completed within the last 4 years. In the view of Baines Simmons, the current regulatory requirement (based on EASA Organisational General regulation) is at OPERATING; however, few regulators are yet mature enough in their Performance Based Oversight programmes to assess this accurately. Given the relatively short amount of time that the ISMS has been in place, to achieve an assessment of High OPERATING and to show demonstrable improvement from last year’s assessment is impressive and considerable effort and commitment has gone into this achievement. Several indicators have already achieved a low or mid EFFECTIVE scoring which is in an industry leading position.

*High OPERATING shows that on average indicators assessed were in the upper end of the MSAT definition for OPERATING which is: There is evidence the feature is in use and an output is being produced.

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





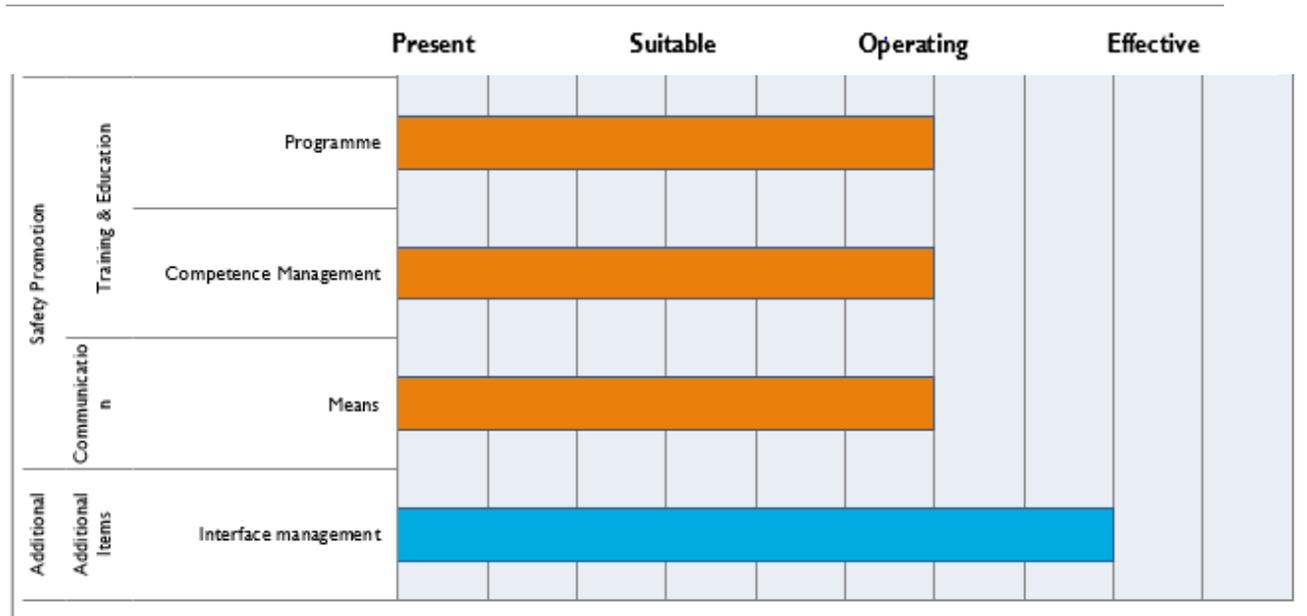


Figure 2: MSAT Results Overview Chart

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 will perform and this is well established. The setting of Safety Ambitions, Objectives against these and measurable targets has greatly improved the focus of the ISMS and given the Management System clear direction. These improvements and the consolidation upon the previous foundations place this area as High OPERATING and close to EFFECTIVE. Small improvements in the areas of Just Culture (more explicit), Resourcing (proof of forecasting) and Documentation Records (demonstrating the use of safety records in enhanced database analysis with ABL) will enable true Effectiveness.

▶ **Safety Risk Management**

▶ Safety Risk Management within the ISMS is maturing and is an area of good competence. The identification of hazards, risk assessments and risk mitigation are fully established and functioning 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 and Safety Review Boards 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 to improve is showing results as is work with emerging risks. There is evidence

of good risk assessment activity, including risks from the management of change process. The continued output, confidence in measures taken and the formal adoption of the Common Risk Matrix has improved from the last assessment and is solidly High OPERATING, an incremental improvement in Risk control by demonstrating continued control will enable Effectiveness in the future.

► **Safety Assurance**

There is evidence of great improvement in this area from the previous assessment. The implementation of a 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 Implementation of Safety Performance indicators set against clear safety objectives and the Top 5 Risks Flight & Ground is Operating and the dashboard includes innovative functionality under development showing precursor events (Threats), the effectiveness of barrier controls and the consequences experienced. Once this dashboard is producing output for the assessment of controls as planned and the SPIs are reviewed, Effectiveness can be achieved in this one remaining Operational area which will take the Safety Assurance section from its current High OPERATING to EFFECTIVE.

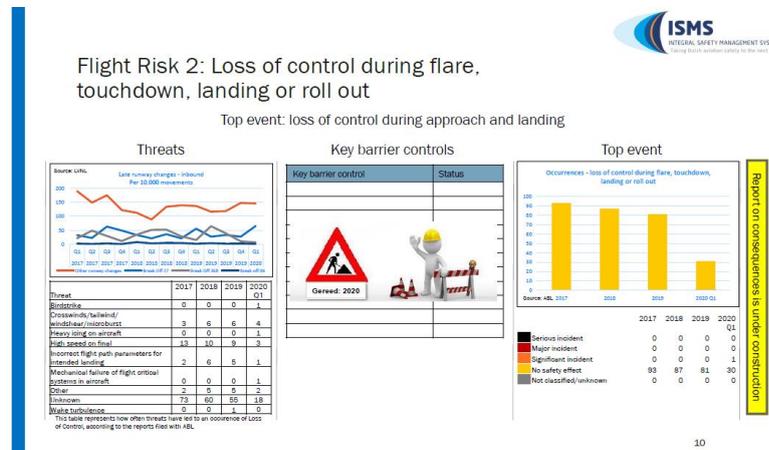


Figure 3: Example of output from the improved Safety Dashboard monitoring the Top 5 Risks in Flight & Ground. Here Loss of control during flare, touchdown, landing or roll out. Elements are still under development.

► **Safety Promotion**

The Integral Safety Office (ISO) addressed previously highlighted deficiencies and implemented a competence framework and training programme for ISO staff. 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 and there was clear evidence that advances are being made. This area is assessed as being OPERATIONAL and the pathway to EFFECTIVE will be the review of the effectiveness of training delivered to the ISO staff and the continuation of communication information.

▶ **Additional Items to be considered**

○ **Interface Management**

The main purpose of the ISMS is to manage the interfaces between the partners and as it is maturing it is demonstrating industry leading practices. Since the last assessment the interface with ABL has visibly improved with ISMS providing guidance to ABL. Further development of the database information, the tracking of precursor reports and enhanced analysis will improve the already proactive way of monitoring safety performance.

○ **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 an internal compliance monitoring programme is not currently in place to assure that the ISMS complies with its own manual. The ISMS partners' internal Compliance Monitoring programmes could consider the interface between their SMS and the ISMS and including it within the scope of their own compliance monitoring programmes.

▶ **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 OPERATING level, in that the ISMS is following its established procedures and has a well documented and structured Safety Management System.

To which degree is safety demonstrably increased by sound cooperation between sector parties is assessed at an OPERATING level in that the Safety Management System is maturing and has started to show some effective output and a demonstrable evaluation of actions taken.

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

- There is the management of safety risk across interfaces.
- That there is an 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.

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 established.

▶ Overall

For the ISMS to achieve an assessment score of High OPERATING, which is above the aviation industry average, improving from its already impressive foundation is a clear demonstration of the 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 have demonstrated full commitment to the implementation and further consolidation of the ISMS. It is this drive, support and very visible endorsement that has been instrumental to the rapid progress so far and the improvements made since the previous assessment. The personality and competence of these executives have been vital in this achievement and should there be any change in personnel this could affect further development and the core cooperation at the heart of the organisation. That said, clear Terms of Reference are in place for any successor and the output, results and maturity of the ISMS are proving its worth and therefore its resilience.

- 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.

- Managed Competence

Those involved with the ISMS are very competent individuals and teams, especially regarding safety. The implementation of a competence and training programme for the ISO will now only enhance this. The continuing support of the ISMS partners in providing enthusiastic and competent staff to engage with the ISMS has proven invaluable.

- Supportive Capability

A robust and well considered structure has been developed for the ISMS which has again aided the implementation and consolidation. 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 was some concern expressed of the effect that any Covid-19 industry turndown could have in maintaining the resource and support to the ISMS but at the time of the assessment there was no evidence of this. On the contrary, the ISMS has been very active in risk assessment and ensuring a safe operation during challenging times.

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 and an example of how airports and the aviation partners within can work together.

The ISMS can be considered established in place and functioning at a High OPERATING level. This is industry leading and the effectiveness of the organisations' enablers has facilitated a rapid rise in maturity. Notwithstanding this, there is a stated safety objective to reach an average of EFFECTIVE with a majority of indicators scoring at an EFFECTIVE level. Many separate indicators are already at Low EFFECTIVE, the ISMS needs to continue with focus on output and continuous improvement of safety performance to achieve this objective which on their current path is entirely feasible.

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	AMS
KLM	AMS
LVNL	AMS
RSG	AMS
Representative Airline	AMS
Representative Refuelling	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.
- ▶ **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 Guidance Committee 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)

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.

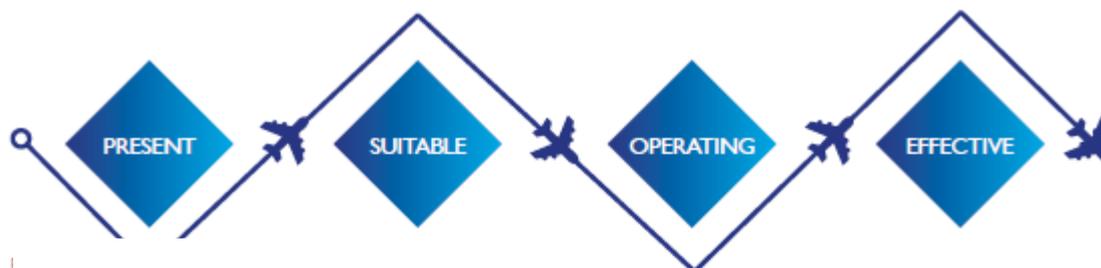
The tool is used by the competent authority inspector to evaluate and record the assessment. Alternatively, it can be partially completed by the organisation to assess itself and by the competent authority to verify and validate the organisation's assessment.

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



Present (P):	Evidence that the 'indicator' is clearly visible and is documented
Suitable (S):	Evidence that it is suitable based on the size, nature, complexity of the organisation
Operating (O):	Evidence that the indicator is in use and a clear output is being produced
Effective (E):	Evidence that the indicator is effective and achieving the desired outcome

Figure: 4 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 organization				
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"> • The Safety Policy is documented within the ISMS Manual, current version 2.2 • The document is in use and periodically reviewed by the core team as to suitability. There is evidence of evaluation. • Evidence that approval of policy and manual discussed at the ISMS Safety Review Board (SRB). • 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. • The Schiphol Safety Improvement Covenant also commits the organisation to continuous improvement. • Annex G to the Manual (Safety Ambitions and Objectives 2020-22) supports the Safety Policy and highlights explicit demands this also demonstrates an extended understanding. 				
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 updated, incorporating additional processes and objectives. The assessment of low 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.
- Use of external consultants enables flexibility and scalability of resource, which has proved useful during Covid-19 period.
- The Roadmap and its workplan are regularly reviewed for progress and assessment of resource both in time and cost.

Conclusion

The Safety Review Board members understand and demonstrate their commitment of resource to the ISMS. The assessment is now high OPERATING with demonstrable improvements in the ISMS and control of resource even during crisis periods. As the system further matures and gains data to proactively forecast resource needs it could progress to Effective.

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) and related AMCs/GM	ATCO.OR.C.001 'Management system of training organisations' 'point (b) and related AMCs/GM
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

1.1.3 The safety policy shall

f) be communicated, with visible endorsement, throughout the organization 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.

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 organizational 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

- Good Accountable Executive attendance at SRB (no substitute policy).
- 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.

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

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 OPERATIONAL commitment to Just Culture principles.
- Accountable Executives understand and committed to Just Culture.
- The Joint Safety Investigations appear to be carried out in just manner.
- There is no Just Culture process or tool.
- The ISMS Just Culture is dependent on the Just Culture of the individual partner organisations. (As highlighted in Business Case 15 Document which examines Just Culture in the Ground Handling environment post the Intergero report)

Conclusion

A Just Culture is evident when discussed, but Just Culture principles in the manual are implicit not necessarily explicit, in that the manual supports a Just Culture but does not state what that means to the organisation nor how (process or measurement) it will be consistently upheld.

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 ORA.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 organization
- 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 Objectives were lacking during the previous Performance Assessment but were planned. This has now been actioned.
- Safety Ambitions and Objectives are outlined in Annex G of the ISMS Manual.
- From the areas of Continuous Safety Improvements, Safety Risk Management and Proactive Safety Planning, six specific Safety Ambitions and four related Safety Objectives were derived. These ambitions and objectives follow the SMART principles, are astute and reflect the core safety business. (SMART; Specific, Measurable, Achievable, Relevant and Time bound.)
- Criteria for success have been set.

Conclusion

Based on results from the previous PA it was identified that there was a gap in this area. On analysis the gap between the Safety Policy (Strategic) and activities such as the ISMS Roadmap (Operational Activities) needed bridging at the Tactical level and it is here that the Ambitions and Objectives have been set.

The rapid advancement to an assessment level of High OPERATING reflects the quality of thought and process that has gone into the development of Objectives and the questions and ambitions they are based on, these are an example of best practice. The pathway to an Effective score will be based on how these objectives are reviewed in future and if there is reflection and confirmation as to their suitability?

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’ AMC2 ATM/ ANS.OR.B.005(a) (3) Management system	ATCO.OR.C.001 Management system of training organisations AMC1 ATCO.OR.C.001(b) 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]		AMC1 ATS.OR.200(1) (i) Safety management system	SAFETY POLICY
AMC2 ORO.GEN.200(a)(5) Management system point (a) - [complex organisations]	AMC2 ORA.GEN.200(a)(5) Management system point (a) - [complex organisations]		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 organization, 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 SMS is being monitored, reviewed and improved.
- Documented evaluation of Roadmap by external agency (NLR, Royal Netherlands Aerospace Centre).
- The further development of Safety Performance Indicators (SPIs) and their visualization in the dashboard is also indicative that safety performance is being monitored and improved.

Conclusion

The SRB is visibly engaged in ensuring the Management System is Effective. The addition of safety objectives to work towards and the safety dashboard to monitor SPIs has demonstrated improvement from the last assessment.

The committee approach to accountability within the joint organisation is clearly documented and appears to function well with the current SRB members. There are robust discussions and clear decisions are made with all SRB members embracing the idea that an integrated safety and cross functional approach is beneficial for all.

Corresponding EU/EASA Requirements

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
ORO.GEN.200 'Management system' point (a)(1) ORO.GEN.210 'Personnel requirements' point (a)	ORA.GEN.200 'Management system' point (a)(1) ORA.GEN.210 'Personnel requirements' point (a)	ADR.OR.D.015 'Personnel requirements' point (a)	ATS.OR.200 'Safety management system' point (1)(ii)(iii) 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.001 Management system of training organisations, (a) 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 organization, 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 organization,
- 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 3.5).
- 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
 Task Forces
 Workshops (for example the Risk assessment workshop)
 These meetings are well structured and documented to provide credible insight and information into risk exposure.
- The Top 5 Risks for Flight and Ground are defined, reviewed and performance monitored, as are emerging risks.

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 improved since the last assessment.

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 appears to have an effective relationship.
- The SM demonstrates a high level of competence in his 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 visible improvements made.
- SM will attend Supervisors training and is appraised every 6 months.

Conclusion

The Safety Manager (Director of ISO) is a highly competent individual in post with EFFECTIVE relationships with senior managers. A continuing development programme is currently not formally in place which would maintain the high level of competence.

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)	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 ADR.OR.D.015(c) 'Personnel requirements'		
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"> Comprehensive structure of safety meetings. Changes are discussed for safety implications and business plans are drawn up of funding needed for mitigations. Safety Objectives are set and monitored. (ISMS Manual Appendix G and SRB Minutes 14 Feb 20) Evaluations of actions and mitigations taken are made. (Examples “Evaluation Report, Measures Roadmap & Safety Improvements Schiphol. May 2020” and the NLR Evaluation Report) 				
Conclusion				
The structure of safety meetings is comprehensive. The introduction of safety objectives, SPIs and the evaluations on actions taken has been an improvement from the previous assessment.				
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

1.4 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 but does fulfill best practice and follows the ICAO Annex 19 principles.
- There are continuing updates to the ISMS Manual. (Current Version 2.2)
- 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.

Conclusion

The ISMS Manual covers the requirements of the organisation and is demonstrably in use. A proactive review of the Manual was completed in June 20. Additions were made to include Safety Objectives, an Evaluation Process and the adoption of the Common Risk Matrix alongside ensuring that the document supports the ISMS. The manual goes beyond compliance to actively support the operating environment. The pathway to highly Effective would be to continue to review and show evidence of continued improvement.

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

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 organizational 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				
<ul style="list-style-type: none"> The ISMS Manual details record control, including data protection. (ISMS Manual Section 6) There is a proactive use of databases and a new dashboard. Work has been conducted with ABL (State Aviation Occurrence Analysis Agency) available data to link Precursor events (Threats) to occurrences to better understand the causes and to work proactively. The evaluation against the road map has also enhanced the ISMS and an understanding of its effectiveness, this is included as an example of how safety records are used for improvement purposes. The improved dashboard visualizes database information against the identified Top 5 flight and ground risks. 				
Conclusion				
Management system records and data are protected and used. Databases are used proactively to manage risk, making this area High OPERATIONAL. For improvements the SPIs that measure against the new objectives need to demonstrate their effectiveness in the future.				
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'	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				
<ul style="list-style-type: none"> • There is a well documented process in the ISMS Manual (section 4.1) which is in use. • The system shows output with identified hazards sent to the Risk Workshop for risk assessment. • Examples of recent Hazard Identification report “Misaligned take off” and risk assessment thereof. NLR Assessment of Closing Taxiway Zulu, Aug 20. • Hazard Identification has shown results with reduction of runway incursion events. • The Standing Committees Ground & Flight conduct Hazard Identification. Emergent risks are assessed. • 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. • NLR Evaluation of Roadmap action effectiveness. 				
Conclusion				
<p>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.</p> <p>Proactive Hazard Identification is taking place and improvements made. For further enhancements the maturity of inputs from the Ground handling environment would enhance the quantification of Ground Hazards to be on par with the Flight environment which has numerous and more established data and reporting sources.</p>				
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"> • Each separate organisation has their own reporting system from which issues are fed into the ISMS. • There has been an increase in number and quality of reports from the Ground Environment. • A meeting forum with the State Aviation Occurrence Analysis Agency (ABL) has been established and report data is used in a proactive way to input into the ISMS dashboard. • Mapping of reported precursor events (Threats) and links to occurrences (undesired outcomes) has been achieved with ABL and now included on the ISMS dashboard. • A Non-Disclosure Agreement (NDA) has been agreed and signed between ISMS partners to enable open reporting and investigation of events, which has enhanced reporting culture and cooperation. 				
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 improved communication with ABL and the proactive use of precursor information has been an enhancement from the previous assessment.</p> <p>Continuing development with ABL to ensure information is used effectively in safety improvements.</p> <p>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
<p>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'.</p>				

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 process within the ISMS Manual (section 4.2)
- Risks are assessed at a Risk Workshop initiated by the Core Team and facilitated by the NLR (National Aerospace Laboratory).
- At the Risk 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 Common Risk Assessment methodology has been formally adopted.
- There is an increased focus on threat lines (Precursors) to risk.
- 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 is demonstrated.

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 (b)(1) - [complex operators] AMC1 ORO.GEN.200(a)(1);(2);(3);(5) 'Management system' points (a), (b) and (d) - [non-complex operators]	ORA.GEN.200 'Management system' point (a)(3) AMC1 ORO.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 organisations]	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'

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.		<p>Appropriate risk controls are being applied to reduce the risk to an acceptable level including timelines and allocation of responsibilities.</p> <p>Human Factors are considered as part of the development of risk controls</p>	<p>Risk controls are practical and sustainable and applied in a timely manner and do not create additional risks.</p> <p>Risk Controls take into consideration Human Factors.</p>

Verification Examples

- Risk controls have been initiated and their effectiveness evaluated.
- Example: The delay in initiating Maintenance work (Summer 2020, to take advantage of Covid-19 reduction in traffic) until suitably assessed risk controls were in place.
- 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. The engagement, competence and to some extent personalities of the Accountable Executives enables this, so any future successor(s) must continue the commitment for the continued effectiveness. There are detailed Terms of Reference detailed for these positions.

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 organization 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 (Verification of Implementation and validation of effectiveness) and evaluated.
- There have been effectiveness of control evaluations conducted by both the ISMS and NLR. Examples include the ISMS Evaluation Report Measures Roadmap Safety Improvement Schiphol, May 2020 and NLR Report NLR-CR-2020-72.
- The NLR Effectiveness report (NLR-CR-2020-72) evaluated the specific risk controls regarding:
 - One way Traffic K Platform
 - Mandatory use of Runway Occupied Strips
 - Extension U-Platform from 5 to 9 Parking positions.
- Safety Performance Indicators (SPIs) have been further developed to include all the Top 5 Risks Flight & Ground and improved with Threat and Consequence information. There is also a Key Barrier Control section under development for each risk.
- 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.

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 organization’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

- Safety Performance indicators and targets have been set against the documented Safety Objectives (ISMS Manual Appendix G)
- The improved Safety dashboard visualizes SPIs against the Top 5 Risks Flight & Ground with Threats (Precursor), Key Barrier Controls (currently work in progress) and Consequences, enabling a proactive approach.
- ISMS is cooperating with the State Aviation Occurrence Analysis Agency (ABL) to further develop analysis capability.

Conclusion

With the formalization of SPIs against set objectives and the development of the Dashboard the Safety Performance monitoring is OPERATIONAL. The further development of Key Barrier controls within the dashboard and validation and review of that newly implemented use of SPIs to ensure a proactive approach will open the pathway to effectiveness and truly demonstrate the effectiveness of safety performance and return on investment back to the organisation.

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 ORA.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’	ATM/ANS.OR.B.005(a)(3) AMC2 ATM/ANS.OR.B.005(a)(3) Management system AMC1 ATS.OR.200(1)(v) Safety management system	Not applicable, however Air Traffic Service Provider provisions apply.

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 TOP SAG 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 (ISMS Manual 4.1.3) and in use.
- The joint ISMS Management of Change process assesses the joint risks for each change. Each individual partner organisation must then also assess the change risk, this being clearly stated in the ISMS Manual.
- The TOP SAG Minutes of Meeting 01 Sep 20 Demonstrate a good example of a Management of Change process regarding Risk assessment construction taxiway Double Quebec Phase 1A.

Conclusion

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

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	
			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
- This Performance Assessment is part of a cycle of continuous improvement.
- There have been other external agency assessments, Intergo report, Kwink Groep & To70 Report, Mar 20.
- The Schiphol Safety Improvement Covenant gives mandate for further development of the ISMS.
- The NLR has evaluated the Roadmap progress.
- Numerous examples of ISMS improvement; Enhanced Dashboard, Formalised SPIs, Objectives & Ambitions set, documented and implemented, adoption of Combined Risk Assessment method.
- Increase in Ground environment reports has led to reassessment of Top 5 Ground Risks.
- Demonstrable improvement in output and maturity of system elements.

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 previous 2019 PA 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 ORA.GEN.200(a)(3) 'Management system' point (f) - [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)(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 introduced since the 2019 PA.
- A Competence Scheme for Senior Programme Manager ISO has been added to the ISMS Manual (Appendix H)

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 OPERATIONAL, for Effectiveness the training programme output requires evaluation and review.

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				
PRESENT		SUITABLE		OPERATIONAL
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.				
Verification Examples				
<ul style="list-style-type: none"> Specifically relevant to the Integral Safety Office. The Skills and Qualities required of SRB, TOP SAG, and the Flight & Ground Standing Committees are described in the ISMS Manual Appendices. A Competence Scheme for Senior Programme Manager ISO has been added to the ISMS Manual (Appendix H). There is currently no Competence Scheme for the Director of ISO (Safety Manager). 				
Conclusion				
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 currently now in place. The process is in use and being recorded and therefore OPERATIONAL. Process maturity will provide opportunity for feedback and any remedial actions to gain Effectiveness.				
Corresponding EU/EASA Requirements				
Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations
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.
- The following safety promotion objectives can be identified for Schiphol:
 - Improve the safety culture and safety performance;
 - Provide information on safety issues, safety metrics, specific threats and barriers;
 - Raise awareness of initiatives to address known safety issues and anticipate new ones;
 - Improve reporting
- The ISMS ran a “Welcome Back” Safety poster campaign for staff returning from Covid-19 furlough which included all partners.
- 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.

Conclusion

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

Corresponding EU/EASA Requirements

Air Operations	Aircrew	Aerodromes	ATM/ANS	ATCO Training Organisations

<p>ORO.GEN.200 'Management system' point (a)(4)</p>	<p>ORA.GEN.200 'Management system' point (a)(4)</p>	<p>ADR.OR.D.005 'Management system' point (b)(9) and AMC1 ADR.OR.D.005(b)(9) 'Management system'</p>	<p>ATM/ANS.OR.B.005(a)(7) ATS.OR.200(4)(ii) AMC1 ATM/ ANS.OR.B.005(a) (7) Management system</p>	<p>Not applicable, however Air Traffic Service Provider provisions apply.</p>
<p>ORO.GEN.200 'Management system' point (a)(5)</p>	<p>ORA.GEN.200 'Management system' point (a)(5)</p>			
<p>AMC1 ORO.GEN.200(a) (4) 'Management system' point (b)</p>	<p>AMC1 ORA.GEN.200(a) (4) 'Management system' point (b)</p>			

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 organizations 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"> 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. There has been an improvement in the communication with the (ABL) and there is sharing of safety data to enhance the ISMS safety performance monitoring and a move to more proactive analysis. A Non-Disclosure Agreement is in place for safety information sharing between partners. There is evidence of Effective Risk Management taking place. Actions are not only taken but verified and validated. 				
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 maturing and effective output being demonstrated, making this now 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"> 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. The Schiphol Safety Improvement Covenant provides the mandate for the ISMS. 				
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"> • There is no defined compliance accountability or responsibility. • There is no regulation to be compliant to. 				
Conclusion				
<p>Not applicable and not included in overall assessment scoring. An internal check of compliance against the ISMS Manual currently not 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"> • There is no Compliance Monitoring Programme • There is no regulation to be compliant to • This PA is part of a regular programme to assess management system performance but could not be considered a full compliance monitoring programme. 				
Conclusion				
<p>Not applicable and not included in overall assessment scoring. An internal check of compliance against the ISMS Manual is currently not in place.</p> <p>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. This PA may be used as a validation of that but those organisations could consider including ISMS Safety Performance as part of their individual Compliance Monitoring Programmes, they could also consider a rotational programme between partners to demonstrate that the interface is effectively managed.</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 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 & 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"> As there are no compliance monitoring activities, there is currently no follow up. 				
Conclusion				
<p>Not applicable and not included in overall assessment scoring. An internal check of compliance against the ISMS Manual is currently not 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 High OPERATING 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 6: Implementation Phases

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