

Continuing Oversight, Integrated Management Systems, and MSAT Tool Guidance

Sofema Aviation Services (SAS) considers key aspects related to the evolving MSAT oversight role

Moving from Initial to Sustained Assurance

Evolving Oversight Role: Initial certification establishes baseline compliance, but the challenge is to ensure that maturity develops beyond the “Present” and “Suitable” levels. Continuing oversight must therefore focus on whether systems remain “Operating” and progress toward “Effective.”

Evolving Oversight Role – From Baseline Compliance to Sustainable Effectiveness

- Initial certification has a relatively narrow purpose: to confirm that an organisation has the essential structures in place, that they are formally documented, and that they are *suitable* for the intended scope of approval. At this stage, regulators are primarily asking: “Is there a management system that meets the regulatory baseline?”
- Once this hurdle is cleared, however, the nature of oversight changes. The competent authority’s role no longer centers on whether policies and manuals exist, but rather on whether these elements are genuinely functioning as intended over time. This requires a shift in focus to monitoring evidence of ongoing maturity—assessing if processes are *not only in operation but demonstrably effective*.

Why “Operating” Is Not Enough

- An organisation may run audits, collect safety reports, or hold safety meetings, but this activity alone does not equate to effectiveness. True maturity is demonstrated when:
 - Audit findings lead to systemic improvements rather than short-term fixes.
 - Safety reports result in visible feedback and preventive measures.
 - Meetings drive decisions and allocate resources, not just produce minutes.
 - Auditors must therefore probe whether processes generate outcomes that *close loops*, reduce risks, and improve performance.

Oversight as a Longitudinal Function

- Certification is a snapshot; oversight is a film. The regulator’s responsibility is to track trajectory, not just status.

- Are the same findings recurring across audit cycles? If so, this suggests stagnation at “Operating” rather than movement toward “Effective.”
- Does the organisation demonstrate resilience to change—e.g., when a new regulation, fleet type, or contractor is introduced, does the MS adapt quickly and sustainably?
- Are improvement initiatives self-driven by the organisation, or reactive only when the authority raises findings?

Balancing Assurance with Improvement

- The challenge for authorities is to maintain regulatory assurance while also enabling continuous improvement.
- If oversight remains purely compliance-driven, organisations may plateau—focusing on *appearing compliant* rather than *becoming effective*.
- Conversely, if oversight only pushes improvement, it risks diluting the assurance function. The balance lies in setting expectations that “compliance is the floor, not the ceiling.”

Signs of Progression Toward “Effective”

- Auditors should look for indicators that go beyond documentation and routine outputs:
 - Cultural Evidence: Do staff articulate safety values and feel empowered to act?
- Data Utilisation: Are safety metrics actively driving management decisions?
- Adaptability: Does the system anticipate and manage change, or is it always catching up?
- Sustainability: Are improvements embedded and lasting, rather than dependent on individuals?

The Regulator’s Strategic Role

- Competent authorities should position themselves not only as enforcers but also as strategic partners in safety performance. This involves:
 - Using oversight findings to highlight systemic risks, not just individual non-conformities.

- Encouraging cross-domain learning (e.g., lessons from CAMO oversight informing MRO assessments).
- Setting expectations for continuous maturity growth using tools like MSAT, where the objective is not just to identify gaps but to track year-on-year development.

Dynamic Risk Environments

- Oversight cannot remain static. As organisations face new regulatory changes (e.g. SMS expansion, ISMS requirements) and operational challenges (digitalisation, outsourcing, fatigue management), oversight methods must adapt.

Key Oversight Practices

- Trend monitoring of SMS and compliance data across audit cycles.
- Linking oversight priorities to organisational risk profiles.
- Encouraging evidence-based improvement rather than retrospective compliance.
- How can competent authorities sustain pressure for continuous improvement without creating audit fatigue or reverting to checklist-driven oversight?

Dynamic Risk Environments – Why Oversight Must Evolve

Aviation organisations are no longer operating in static or predictable contexts. The regulatory landscape itself is shifting

- Examples include:
 - The mandatory integration of SMS in all domains,
 - The emergence of Information Security Management System (ISMS) requirements under Regulation (EU) 2023/203, and
 - Ongoing adaptation to ICAO Annex 19 expectations.

Reality Check - operational pressures such as outsourcing, digital transformation, and human performance challenges are introducing new categories of risk.

This dynamism places pressure on oversight authorities to adapt their methodologies.

If oversight remains fixed in a “snapshot” compliance model, it risks missing systemic vulnerabilities or emerging risks that do not fit into traditional audit categories.

Regulatory Change as a Moving Target - What was once optional or sector-limited is now mandatory across operators, maintenance, CAMOs, and airports.

- Oversight must confirm not just presence of SMS, but quality of integration into decision-making.
- Cybersecurity requirements add a new dimension to safety oversight. An organisation may be compliant with aviation safety requirements but exposed to information security vulnerabilities that undermine resilience.
- Though not always framed as “safety,” pressures from EU Green Deal and ICAO CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) are reshaping operational risk. Oversight must interpret how such obligations affect management system resilience.

Operational Challenges that Shift Risk Profiles

- **Digitalisation:** Predictive maintenance, e-tech logs, and AI-supported flight planning introduce both opportunities and risks.
 - Oversight must verify not only the reliability of the technology but also the robustness of human oversight of digital tools.
- **Outsourcing and Contracting:** Increasing reliance on third parties for maintenance, ground handling, and security creates extended organisational boundaries.
 - Auditors must examine whether oversight extends across this wider ecosystem.
- **Fatigue and Human Factors:** In a period of staff shortages and recovery from the COVID-19 downturn, fatigue, turnover, and reduced competence are persistent hazards.
 - Oversight must ask whether organisations monitor these risks dynamically rather than treating them as one-off HR issues.

Key Oversight Practices for Dynamic Risk Environments:

Trend Monitoring Across Audit Cycles

- Instead of auditing the same processes on rotation, authorities should consider tracking patterns over time:
 - Are hazard reports increasing, stable, or declining?
 - Do repeat findings indicate systemic weakness?
 - Is safety culture showing measurable improvement (survey-based or behaviour-based)?
- This transforms oversight from an annual “snapshot” into a continuous maturity curve evaluation.

Linking Oversight Priorities to Organisational Risk Profiles

- Oversight should be risk-based:
 - A cargo operator with dangerous goods exposure requires different priorities than a business jet operator.
 - An MRO with extensive subcontracted work requires deeper contractor oversight scrutiny.
- Authorities should adapt their audit programmes annually, informed by risk intelligence (occurrence reports, reliability data, trend monitoring).

Encouraging Evidence-Based Improvement

- Instead of focusing on compliance with the letter of regulation, oversight should emphasize whether organisations use evidence to improve their systems:
 - Is reliability data influencing AMP changes
 - Do fatigue reports trigger proactive roster adjustments?
 - Are cyber events feeding into risk registers?
- This moves oversight from retrospective correction (“fix the finding”) to prospective prevention (“learn from the evidence”).

Sustaining Pressure Without Creating Audit Fatigue

- One of the greatest challenges for regulators is to demand continuous improvement without overwhelming organisations with constant checks or reverting to box-ticking.
- Key strategies include:

- **Rotating Focus:** Maintain a core baseline of oversight but rotate emphasis areas year-to-year (e.g., one cycle focusing on data integration, another on contractor oversight).
- **Integrated Audits:** Rather than running separate audits for safety, compliance, and security, authorities should move toward integrated assessments that reduce duplication while assessing how systems interact.
- **Dialogue-Centred Oversight:** Use MSAT not just as a scoring mechanism but as a structured conversation.
 - This encourages organisations to reflect on their own weaknesses and prevents the audit from becoming a checklist exercise.
- **Outcome-Oriented Reporting:** Frame findings around impact and outcomes, not just non-compliance.
 - For example, instead of “hazard reports not filed within 30 days,” report “late hazard reporting delays trend analysis and weakens risk management.”
- **Promoting Internal Assurance:** Encourage organisations to strengthen their own compliance monitoring and internal audits so that the competent authority can place reliance on internal assurance and reduce duplication.

How can competent authorities maintain oversight pressure that drives genuine continuous improvement without reverting to checklist auditing or creating resistance from organisations?

Consider:

- What balance between mandatory baseline checks and variable, risk-based focus is most effective?
- How can regulators use trend data to identify areas requiring deeper oversight while reducing burden elsewhere?
- What practical methods exist to measure effectiveness without expanding audit volume?

Quality Integration Challenge: Mature applicants increasingly operate multiple management systems (SMS, QMS, ISMS, environmental, occupational health & safety). Without integration, silos emerge, causing duplication, conflicting priorities, and loss of efficiency.

- **Oversight Perspective:** Auditors must evaluate not only the effectiveness of each individual system but also the degree of integration
 - How safety, compliance, quality, and security functions reinforce one another.

- A single set of objectives and policies that cover safety, compliance, and performance.
- Cross-functional hazard identification (e.g. safety + cyber risks in digital maintenance systems).
- Common data repositories and reporting portals. Shared learning initiatives (safety promotion linked to compliance and information security).

Tool Guidance – Making Best Use of MSAT

The MSAT is designed to be a structured dialogue tool for inspectors and organisations, designed to drive a performance-based conversation.

Strength in PSOE Application: Auditors must be comfortable differentiating between “Operating” and “Effective” indicators. The tool guidance highlights that maturity evaluation is qualitative, requiring professional judgement and evidence triangulation.

Scalability & Suitability: MSAT stresses that application must be scaled to the size, nature, and complexity of the organisation. Oversight should adapt MSAT questions to avoid over-burdening smaller entities or under-scrutinizing larger, complex operators.

Learning Value:

Use the MSAT to encourage internal reflection, organisations should recognise their own maturity gaps, not simply receive audit findings.

Apply the tool as part of continuing oversight, not just at certification.

Tool Guidance – Making Best Use of MSAT

While MSAT provides a structured way to capture observations, the primary value is not in the numeric outcomes. If inspectors treat it as a scoring mechanism, the process risks devolving into a compliance matrix rather than a performance dialogue.

- **Conversation-Centred Oversight:** Each MSAT feature should spark a discussion between inspectors and the organisation—why certain processes are in place, *how* they function in practice, and *what evidence* demonstrates effectiveness.
- **Qualitative Judgement:** Rather than debating whether an organisation deserves “2” or “3” on a scale, the dialogue should uncover the story behind the evidence. For example, is a safety culture survey conducted annually but ignored by leadership? That nuance is lost if reduced to a number.

- **Practical Implication:** Inspectors should use MSAT language as prompts, not verdicts—helping the organisation reflect on whether it is delivering safety outcomes or simply maintaining paperwork.

Strength in PSOE Application – Differentiating Operating vs Effective

The **Present–Suitable–Operating–Effective (PSOE)** maturity model is central to MSAT, but its application demands professional judgement.

- **“Operating” Indicators:** Processes exist and are functioning as intended—audits are scheduled, reports filed, risks logged. However, activity at this level can be superficial or ritualistic.
- **“Effective” Indicators:** Evidence shows that the process is producing *sustained and beneficial outcomes*—audit findings reduce recurrence, reports lead to preventive measures, risk logs drive resourcing decisions.
- **Evidence Validation:** Inspectors should corroborate claims by looking at:
 - **Documentation** (policy, procedures, manuals).
 - **Observation** (behaviour in operations, staff engagement).
 - **Interviews** (how personnel describe processes and whether this matches what is written).
- **Common Pitfall:** Organisations often overstate maturity by pointing to activities as proof of effectiveness. Auditors must push further: Is the activity driving measurable change?

Scalability & Suitability – Adapting MSAT to Context

MSAT’s guidance stresses proportionality. A small CAMO managing three aircraft and 20 staff cannot be assessed with the same intensity as a flag carrier or multinational MRO.

At the same time, large organisations require more granular scrutiny to avoid under-assessment.

- **For Small Entities:** Inspectors should streamline questioning, focusing on critical features (e.g., hazard identification, reporting, compliance monitoring).

- The aim is to validate that processes are embedded without over-burdening the organisation.
- **For Large/Complex Entities:** Oversight must avoid surface-level sampling. Here, MSAT prompts should be expanded into deep dives, checking how safety and compliance are managed across multiple divisions, contractors, or geographies.
- **Domain-Specific Scaling:**
 - **Airports:** Integration with multiple tenants and contractors.
 - **MROs:** Human factors and subcontractor oversight.
 - **Airlines:** Fatigue, ERP integration, data analytics.
 - **CAMOs:** Reliability data linkage and continuing airworthiness change management.
- **Practical Implication:** Inspectors should plan MSAT deployment in advance—identifying where scaling down (to reduce burden) or scaling up (to probe deeper) is appropriate.

Learning Value – Building Organisational Self-Awareness

MSAT is not just an inspector’s tool; it should be a mirror for organisations.

- **Encouraging Reflection:** Instead of leaving with a list of findings, organisations should come away with a clearer view of their own maturity gaps.
 - For example, if an organisation rates itself as “Effective” but cannot demonstrate feedback loops, the MSAT dialogue exposes that blind spot.
- **Continuous Use:** The tool should not be reserved for initial certification.
 - It is most powerful when applied across oversight cycles, enabling authorities and organisations to measure progression over time.
- **Internal Adoption:** Mature organisations can even adopt MSAT internally, using it as part of self-assessment before external oversight.
 - This aligns with EASA’s push toward performance-based oversight and shared responsibility.

Consistency vs Tailoring

The challenge is balancing **consistent application across domains** with **tailoring to organisational complexity**.

- **Consistency Requires:**
 - Inspectors using a shared vocabulary and methodology.
 - Common training to ensure similar interpretation of PSOE levels.
 - Benchmarking across authorities and domains to reduce subjectivity.
- **Tailoring Requires:**
 - Adjusting scope, depth, and emphasis depending on organisational size and risk profile.
 - Recognising that some features (e.g., cyber risk in ISMS) may be highly relevant for one organisation but less critical for another.
- **Balancing Act:** The art of oversight lies in applying the same framework with flexible depth. This allows the competent authority to maintain comparability without applying a rigid, one-size-fits-all approach.

Consider the value when inspectors are able to:

- Distinguish between activity and effectiveness.
- Adapt oversight to organisational context.
- Build reflective learning in organisations.
- Apply it consistently across domains, while respecting complexity and scale.

Key Takeaways

Continuing oversight must be forward-looking, addressing evolving risks rather than recycling previous findings.

Integrated management systems represent a new oversight frontier, requiring auditors to think cross-domain.

MSAT is most powerful when used as a facilitation and dialogue tool, not merely a scoring mechanism.

Key Takeaways

Continuing Oversight – From Compliance to Longitudinal Assurance

- **Certification is a baseline, not an end state.** True oversight value lies in monitoring trajectory over time—whether systems evolve from “Operating” into genuinely “Effective.”
- **Effectiveness is evidenced by outcomes, not activity.** Auditors should look for loop closure, sustained improvements, and resilience to change, not just the presence of routine processes.
- **Balance is critical.** Oversight must assure compliance while also sustaining momentum for improvement—avoiding both stagnation and excessive burden.

Oversight in Dynamic Risk Environments

- **Risk profiles are shifting.** SMS expansion, ISMS requirements, outsourcing, digitalisation, and human factors demand adaptive oversight methods.
- **Trend analysis across audit cycles is essential.** Authorities should track patterns of findings, safety reporting behaviour, and cultural indicators rather than treating each cycle in isolation.
- **Outcome-focused oversight sustains improvement without creating audit fatigue.** Auditors should rotate focus areas, integrate audits, and frame findings in terms of impact on performance.

Integrated Management Systems – Breaking Down Silos

- **Integration is now a performance marker.** Safety, compliance, quality, security, and environmental systems cannot be assessed in isolation; auditors must evaluate how they reinforce (or conflict with) each other.

- **Cross-functional risk management is vital.** Oversight should examine whether hazards are managed holistically—for example, whether digital reliability tools link safety, cyber, and compliance considerations.
- **Shared learning drives maturity.** Promotion activities, data repositories, and objectives should extend across system boundaries, not sit in separate silos.

MSAT as a Dialogue and Reflection Tool

- **Not a scorecard.** MSAT is most valuable when used to drive structured, performance-based conversations rather than reduce maturity to numbers.
- **PSOE differentiation requires judgement.** Inspectors must distinguish between processes that simply *operate* and those that demonstrably *improve outcomes*, using evidence triangulation (documents, observations, interviews).
- **Scale with proportionality.** MSAT application must reflect organisational size, scope, and complexity—streamlined for smaller entities, but expanded into deep dives for large or high-risk operators.
- **Learning for both sides.** MSAT should help organisations self-identify maturity gaps while enabling authorities to benchmark progression over time.

Strategic Role of Oversight Authorities

- **From enforcers to partners.** Authorities add most value when they use oversight findings to highlight systemic risks, share cross-domain lessons, and guide organisations toward maturity growth.
- **Setting expectations for continuous development.** Compliance should be framed as the floor, with effectiveness and resilience as the aspirational ceiling.
- **Consistent yet tailored application.** The art lies in applying MSAT and integrated oversight consistently across domains, while tailoring depth and focus to organisational complexity and risk.

Next Steps

Sofema Aviation Services (SAS) provides the following training as Classroom or Webinar - Using The EASA Management System Assessment Tool (EASA MSAT) – 2 Days

<https://sassofia.com/course/using-the-easa-management-system-assessment-tool-easa-msat-2-days/>