Australian Government
Department of Defence
Defence Aviation Safety Authority

Directorate of Aviation Operations (DAVNOPS)

Webinar – DASA Safety Management Systems Transition

28 August 26

Objective: BP59022281

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DAVNOPS SMS Team (SO2 SMS 3)

Australian Government
Department of Defence
Defence Aviation Safety Authority

Aim:

Engage the Aviation Safety community on the February 2026 release of *DASR SMS.*

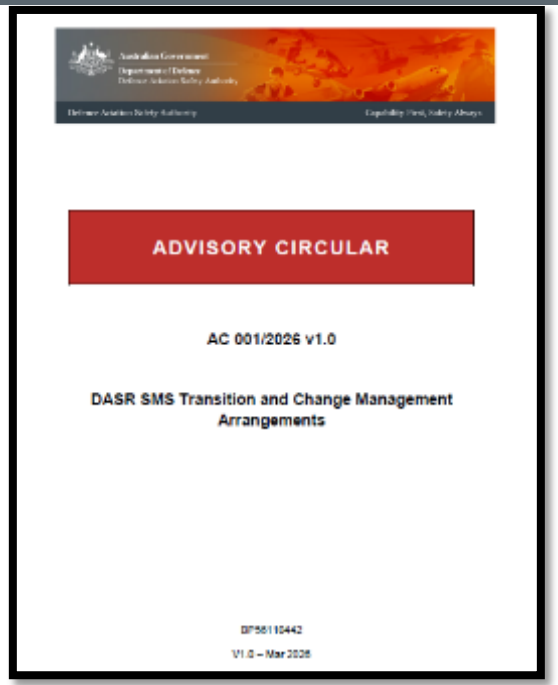
Scope

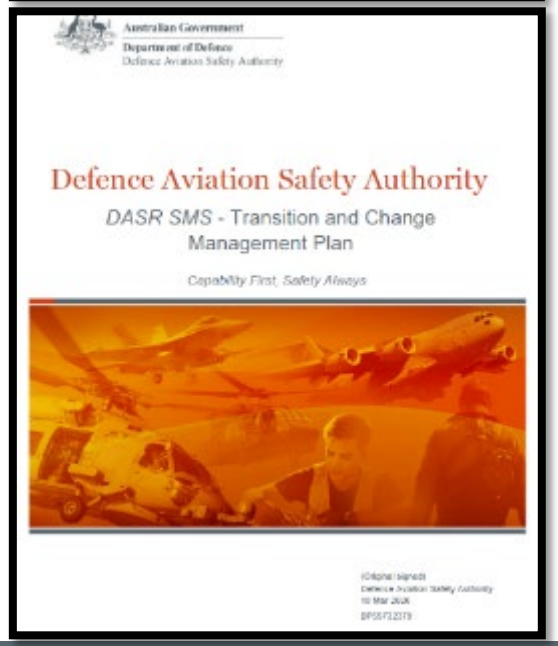
- **DASR SMS Transition**
  - AC 001/2026 – *DASR SMS* Transition and Change Management Arrangements
  - DASR SMS Changes
  - Transition timeline
  - Demonstrating compliance
  - Withdrawal of the *DASM*
- **Element 3.1: Safety Performance Monitoring & Management**
- **Other Updates**
  - Aggregation of Risks
  - DFSB

NOTE: Based on some of the questions asked during the webinar, we have added two additional slides to what was presented this morning which clarify the practical actioning and management of SPIs, but you will find the additional information self-explanatory

SMS Transition and Change Management Plan

- AC 001/2026 DASR SMS Transition and Change Management Arrangements
  - SMS Webinars
  - MAO SMS / QMS reviews and workshops
  - Transition education and training (inc. FAQs)
  - Pause on SMS findings (except Level 1).
  - Change Management Plan
  - DASM-DASPMAN cross-reference matrix (live document)





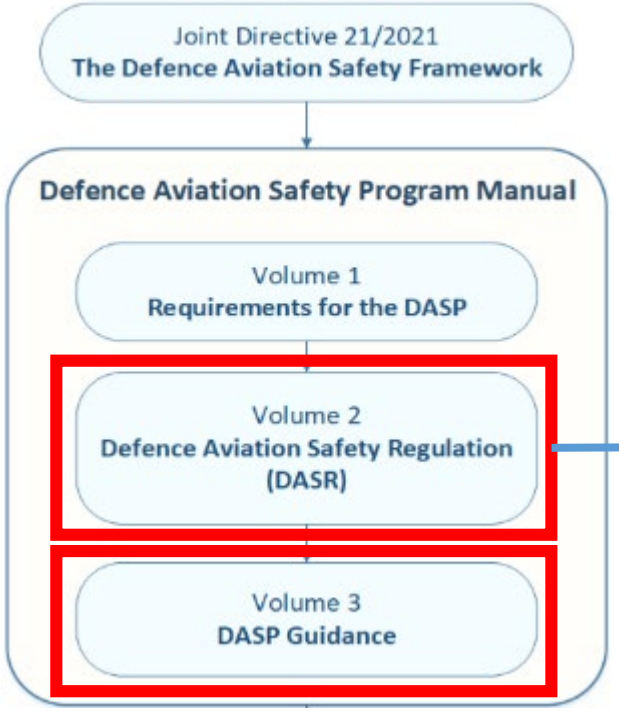
DASR SMS Update - Regulation, AMC & GM

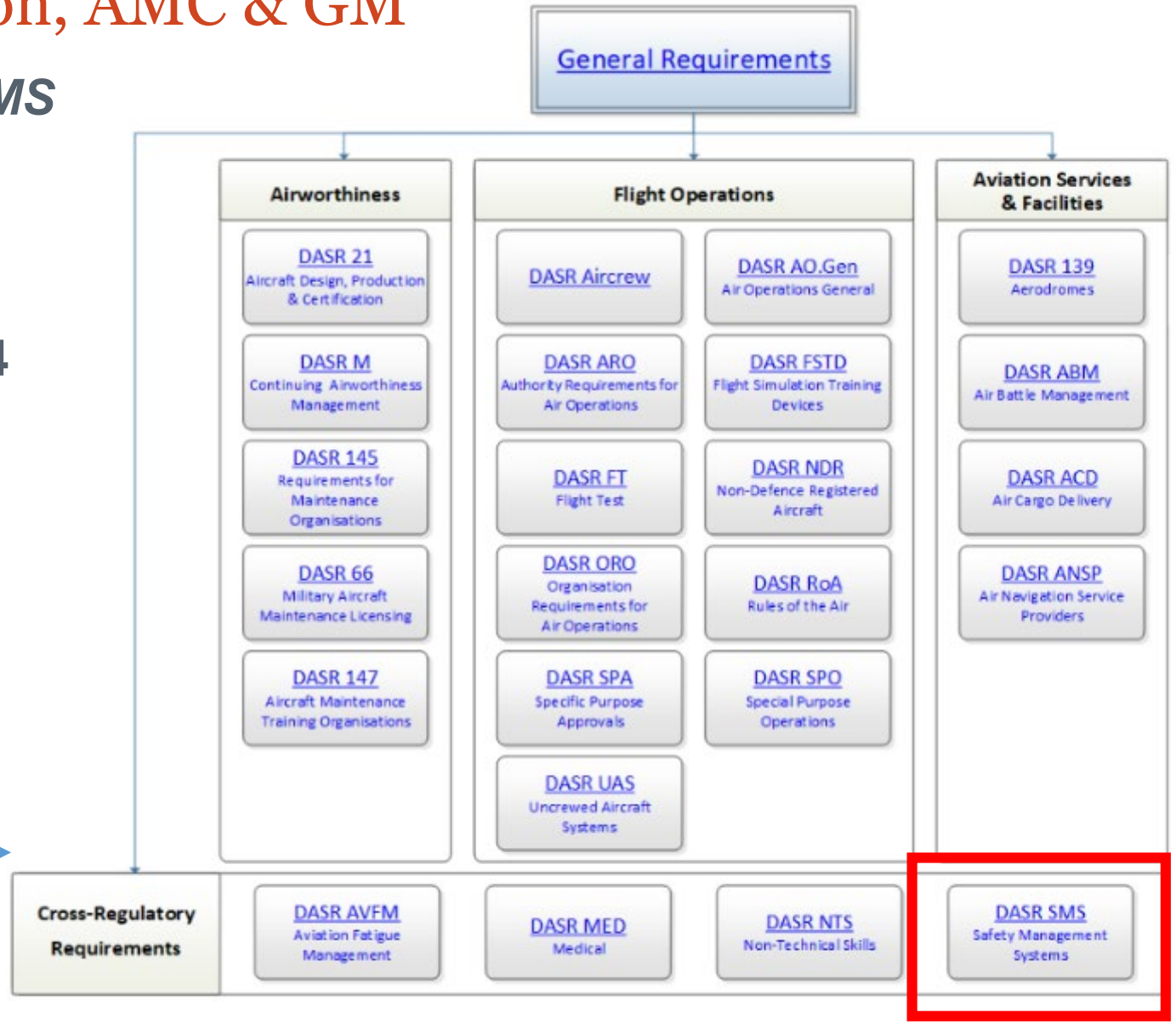
DASPMAN Volume 2 – *DASR SMS*

- Regulation and AMC
- ADF & Non-ADF flexibility

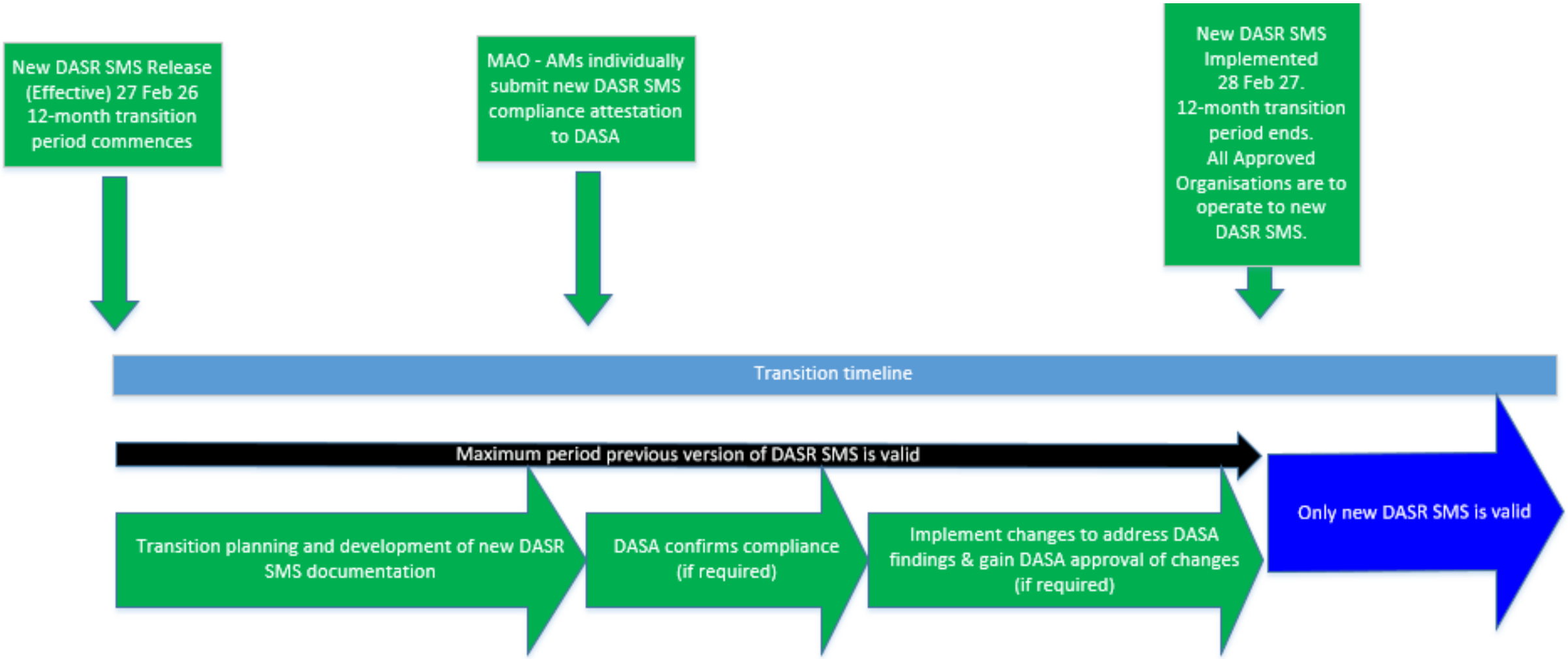
DASPMAN Volume 3 Chapter 14

- 129 Pages of GM





SMS Transition Plan - Transition Timeline



SMS Transition and Change Management – Demonstrating Compliance

Things for you to do:

1. Engage with DASA early.
2. Get familiar with ‘New Look’ *DASR SMS* regulation and AMC.
3. Use the PSOE Evaluation Tool to identify gaps.
4. Understand the potential workload (and resources required) to achieve compliance (eg relied on references to DASM or AC 003/2018?).
5. Plan the transition.
6. Update SMS documentation and artefacts.
7. MAO-AMs – Submission of compliance evidence to DASA for evaluation and transition to the new regulation.

Transition Process – DASR 21, 145 and M Organisations

– Always contact your DASA Desk Officer and confirm the process for your organisation –

Typical process (DASR 21, 145 and M Organisations):

1. Review and update extant SMS documentation for compliance with the new SMS requirements.

2. Changes should be assessed to determine if they represent a significant change.

    a. **Significant / Major:** Submit the appropriate DASR Form (see table) with supporting documentation.

    b. **Not Significant / Minor:** Approve internally and supply DASA with copies of the updated SMS Documentation.

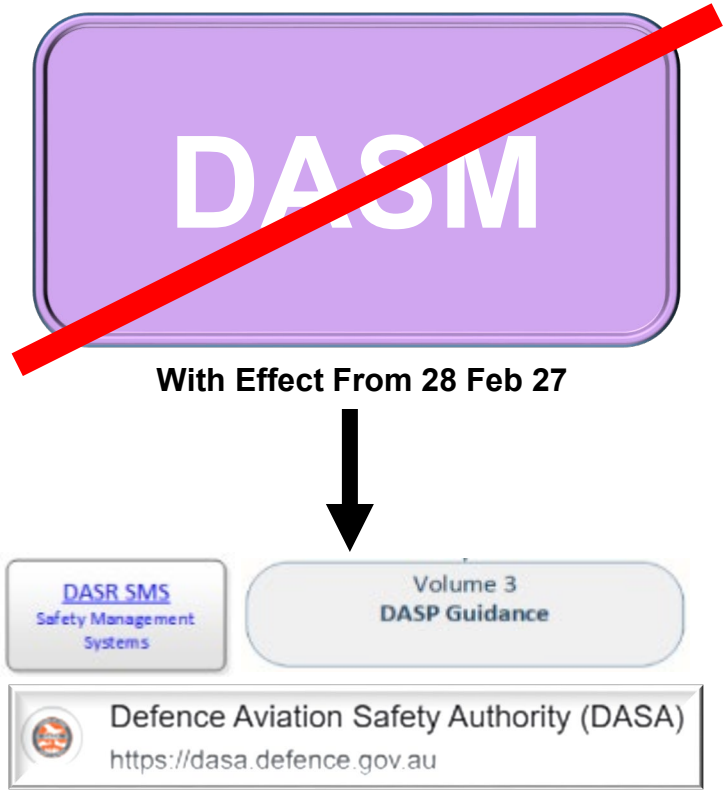
Note: *M & MTCHO's require integration with the MAO/Entp.*

Organisation Type	DASR Form for Significant / Major change	Update to handbook / exposition for other changes
DASR M – Continuing Airworthiness Management	DASR Form 2	M.A.704(c)
DASR 145 – Maintenance Organisations	DASR Form 2	145.A.70(c)
DASR 21		
Military Design Organisation Approval (MDOA) – Subpart J	DASR Form 82 (AMC 21.A.253)	21.A.243(c)
Military Production Organisation Approval (MPOA) – Subpart G	DASR Form 51 (AMC 21.A.153)	21.A.143(b)
Military Type Certificate Holder Organisations (MTCHO) – Subpart C	DASR Form 80C (GM 21.A.79)	21.A.77

SMS Transition Plan – Withdrawal of the DASM

The DASM will be formally withdrawn 28 Feb 2027.

- It may continue to be used as the 'corporate solution' during the transition period.
- No information from the DASM will be orphaned – redirected to:
  - DASR SMS Vol 2
  - DASR SMS Vol 3
  - DASA Webpage
  - Defence Flight Safety Reporting Manual
    - SMS reporting and SMS investigations
  - Defence Flight Safety Investigations Policy/Manual
    - Independent Investigations
  - SMS Handbooks
- DASM to DASPMAN Vol 2 & 3 cross reference matrix
- Changes to DASR SMS (Feedback welcome)
  - DASPMAN Vol 2 – DASR Change Proposal (Form 111) (DASA website)
  - DASPMAN Vol 3 – email (dasa.asms@defence.gov.au)
  - FAQ



SMS Transition - Resources

- Transition resources will continue to be updated on the DASA Safety Management Systems webpage.

- If you have issues accessing these resources, contact us at: dasa.asms@defence.gov.au

SMS Regulated Community engagement 2025/26

The 01/25 Defence Aviation Safety Board approved a 12-month pause to DASA oversight and enforcement activities for MAOs, commencing June 2025. This is a result of direct DASA observations of the DASC and DASC feedback. In place of MAO oversight, DASA will conduct an SMS and QMS review to assist MAOs to improve understanding and compliance, on non-jeopardy agreement, with SMS and QMS requirements.

DASA is conducting SMS Town Halls to engage the safety community to provide regular updates and opportunity for Q & A. Previous SMS Town Hall recordings, transcripts and FAQs are available below:

SMS Town Hall Presentations 2026

Mar Apr May Jun Jul Aug Sep Oct Nov

Element 3.1 Safety Performance Monitoring & Measurement

SMS.30 - COMPONENT 3: SAFETY ASSURANCE (AUS)

(a) The Authorised Organisation must conduct safety assurance using artefacts documenting the following SMS elements:

1. **Element 3.1:** Safety performance monitoring and measurement.

   a. The organisation must implement safety performance monitoring and measurement to validate and improve the effectiveness of the safety risk controls. **AMC**

Safety Performance Management Obligations

DO YOU SEE A COMMON THEME?

3. Safety assurance (SMS Component 3)

3.1 Safety performance measurement and monitoring

The service provider shall establish means to:

a) measure and monitor the safety performance of the organization;
b) measure and monitor the progress towards achieving its safety objectives; and
c) validate the effectiveness of safety risk controls.

ICAO

38 Review of control measures

(1) A duty holder must review and as necessary revise control measures implemented under these Regulations so as to maintain, so far as is reasonably practicable, a work environment that is without risks to health or safety.

WHS

Duties of 'Officers' under the WHS Act: …to ensure that the PCBU has appropriate processes for *receiving and considering* information regarding incidents, hazards and risks and responding in a timely way to that information.

SMS.30 - COMPONENT 3: SAFETY ASSURANCE (AUS)

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1. **Element 3.1:** Safety performance monitoring and measurement.

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DASR

Element 3.1

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   a. The organisation must implement safety performance monitoring and measurement to validate and improve the effectiveness of the safety risk controls. ▾ **AMC**

AMC SMS.30(a)1 - Safety performance monitoring and measurement (AUS)

a. The organisation should:

i. monitor, measure and verify safety performance

ii. periodically review and update safety objectives, safety targets and safety performance indicators

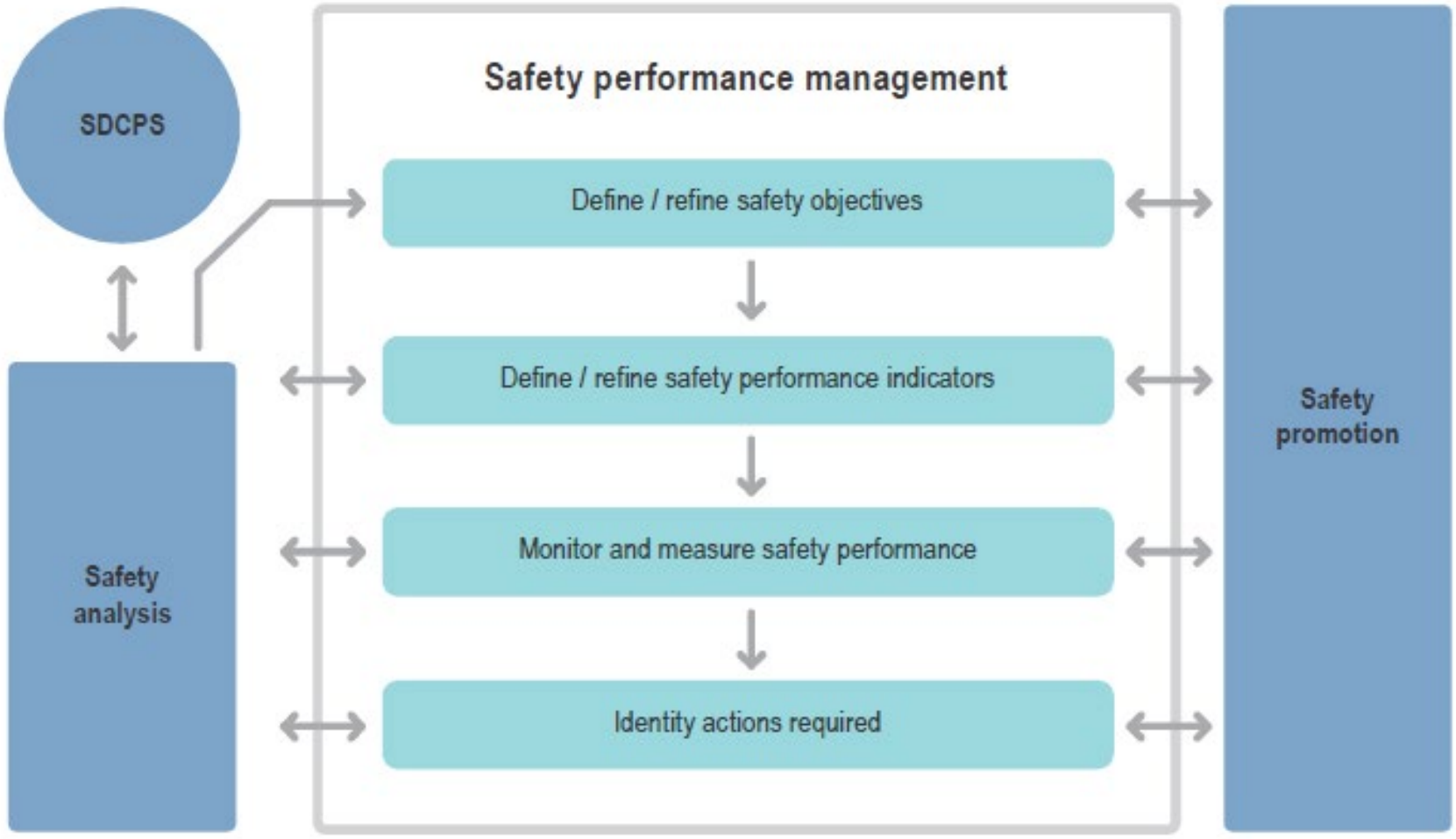
iii. analyse Aviation Safety data

iv. include Aviation Safety survey programs

v. periodically conduct safety audits.

What is Safety Performance Management?

- It's the considered application of a process!



Source: ICAO DOC9859 – Safety Management Manual

From DOC 9859:

Safety performance indicator. A data-based parameter used for monitoring and assessing safety performance.

SMART

Safety performance target. The planned or intended target for a safety performance indicator **over a given period** that aligns with the safety objectives.

Criteria. An established value for a particular safety performance indicator that serves to initiate an action required.

Element 1.1 Management Commitment

SMS.10 - COMPONENT 1: SAFETY POLICY AND OBJECTIVES (AUS)

(a) The Approved Organisation must implement defined policy and objectives for all SMS elements, including:

1. **Element 1.1:** Management commitment. **AMC**

AMC SMS.10(a)1 – Management commitment (AUS)

a. An organisation should demonstrate management commitment through:

i. a safety policy that:

(a) sets the Accountable Manager's (AM's) commitment to safety and to continuous improvement-including the promotion and maintenance of a positive Safety Culture

(b) complies with all applicable DASR requirements

(c) provides the necessary resources for implementing the safety policy at all levels of the organisation

(d) defines safety as a primary responsibility of all managers

(e) is understood, implemented and maintained at all levels

(f) actively encourages safety reporting and protection of safety data

(g) defines a method of determining acceptable and unacceptable safety behaviour and commensurate action

(h) remains relevant and is 'visibly endorsed' by the AM

(i) is issued by the AM.

ii. documented safety objectives that:

(a) define safety outcomes the SMS aims to achieve

(b) are brief, high-level statements of the organisation's safety priorities and address the most significant safety risks

(c) form the basis for safety performance monitoring and measurement

(d) are communicated throughout the organisation

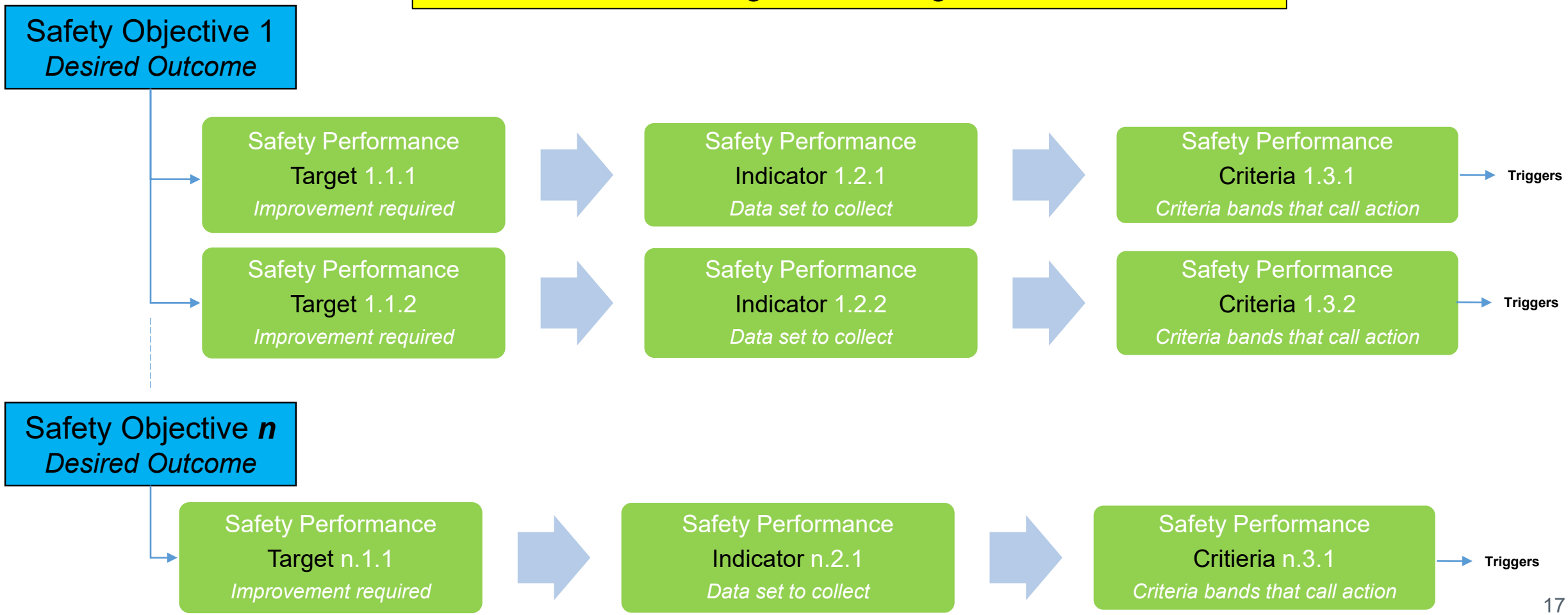
(e) remain relevant to the organisation and are periodically reviewed.

Safety Objectives – Linking to SPIs and SPTs

Source: (DASPMAN Vol 3 Chp 14.4.15)

Safety objective. A brief, high-level statement of **safety achievement or desired outcome** to be accomplished by the service provider's safety management system.

Effective SPIs = Defining and enacting each element below!



SPI Balance Example

100% of your developed & selected SPIs

Core (enduring) SMS SPIs (~70%)

Objective	SPI
Safety Performance	ASR event reporting (tailored/organised data)
Hazard ID	Reporting rate
Risk Management	Overdue risk controls
Assurance	Audit finding closure rate
Continuous Improvement	Repeat findings
Training	Compliance
Safety Culture	Culture index/assessment
Communication	Event feedback timeliness

Dynamic (risk-based) SPIs (~30%)

Current Strategic Risk	SPI
Fatigue	Fatigue reporting
Workforce turnover	Safety-critical position effectiveness
New capability IIS	Change-related hazards
Operational tempo	Event reporting rate during high tempo periods

SDCPS: Sentinel, SALUS, Snapshot, audit results (internal/external), risk register, NetMAARS, FlyPro/Pex.

What is the difference between a Lead and Lag Indicator?

Is it a precursor to the event (proactive)? Or are you looking retrospectively (reactive)?

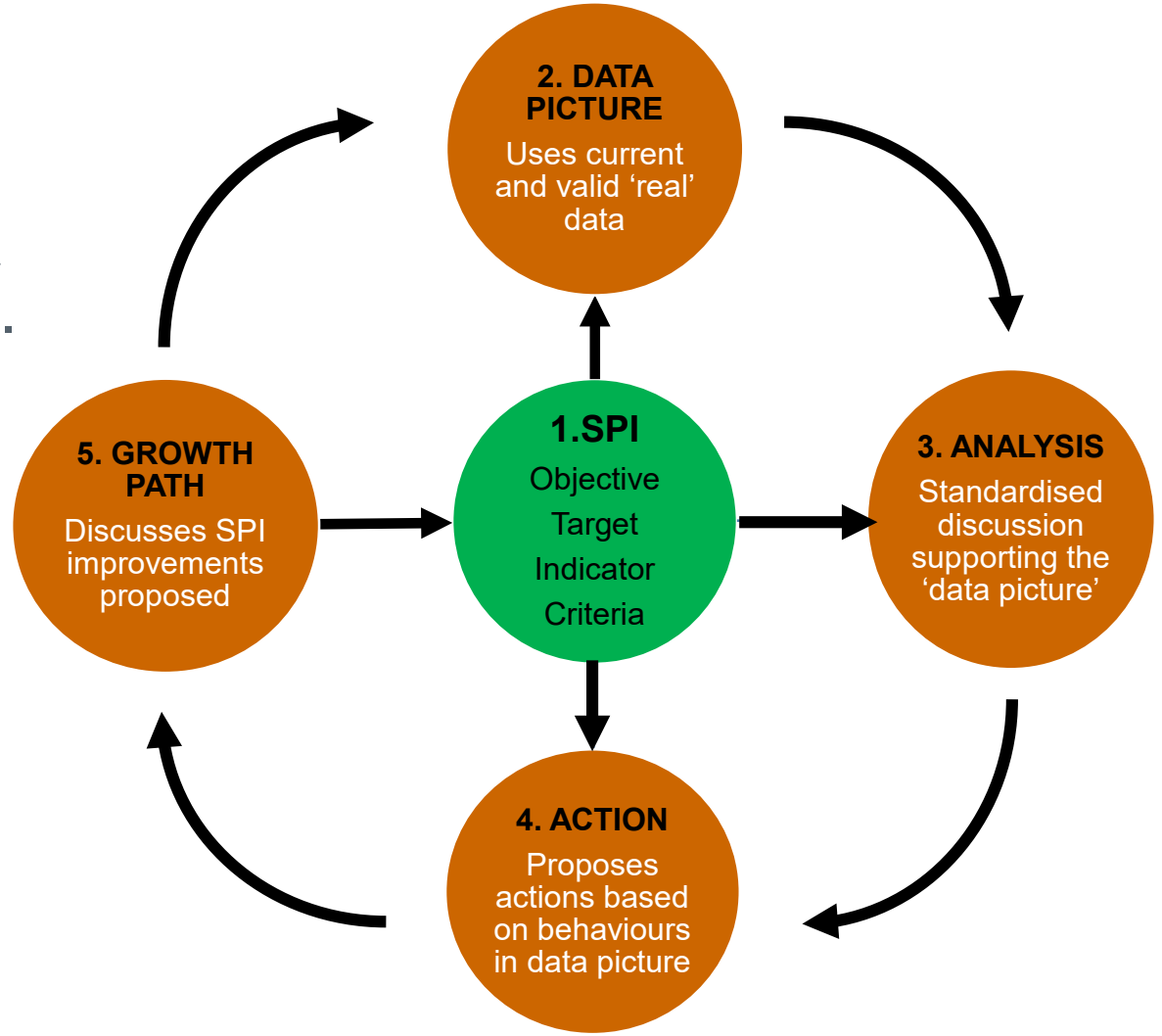
> **Lagging SPIs.** Lagging SPIs (reactive) help the organisation understand what has happened in the past and are useful for long-term trending.
>
> **Leading SPIs.** Leading SPIs (proactive) focus on processes and inputs that are being used to improve or maintain safety, and are also known as 'activity or process SPIs' as they measure conditions that have the potential to contribute to a specific safety outcome (or how the organisation copes with introduced change, to anticipate weaknesses).

- It is point of view dependent.
  - One person's lagging SPI is another person's leading SPI.

Source: (DASPMAN Vol 3 Chp 14.4.21)

What are the common PI components for effectiveness?

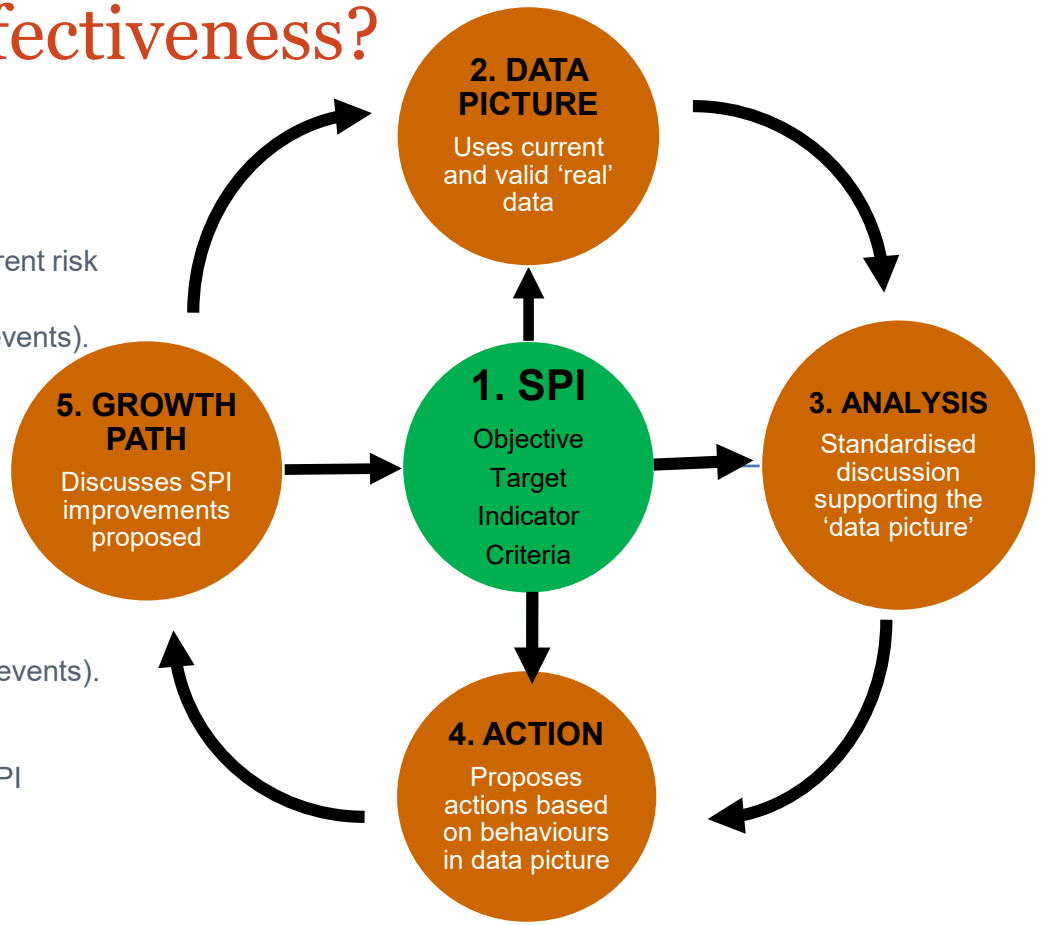
- **Five** components to an ‘effective’ SPI – minimum info, maximum consistency.
- Use them to paint a visual storyboard with a pithy summary, not an ‘essay-style’ analysis.



What are the common PI components for effectiveness?

1. SPI Design

- **Objectives**
  - Brief, high-level statements of desired outcomes, consistent with unit policy. May be:
    - **process-oriented** (for effective process application, eg an improvement in the number of current risk assessments)—**Note: Avoid 'negative' versions…**
    - **outcome-oriented** (for effective outcomes, eg a reduction in the rate of airborne separation events).
- **Targets**
  - Define the desired performance--a measurable way of verifying effectiveness.
  - Should account for factors such as the prevailing level of safety risk, as well as being realistic when considering historical norms.
  - Should challenge units to do better (eg a 5% improvement year-on-year)
- **Indicator**
  - Reflects the unit measure/data source to be used (eg number of airborne separation minima conflict events).
- **Criteria**
  - Criteria 'bands' provide traffic light trigger ranges to direct more action or to just keep monitoring the PI



2. Data Picture

- Where does the data come from? How will you display it for max effect?

3. Analysis

- What does the data tell you WRT to objective and target? Do you have other evidence to supports your view?

4. Action Required

- Based on the data, what action is required, by whom, by what date, and how to track action closure?

5. Growth Path

- What improvement are required to the design/retirement of the SPI and by when, given the analysis provided?

What is the difference between a Lead and Lag Indicator? (2)

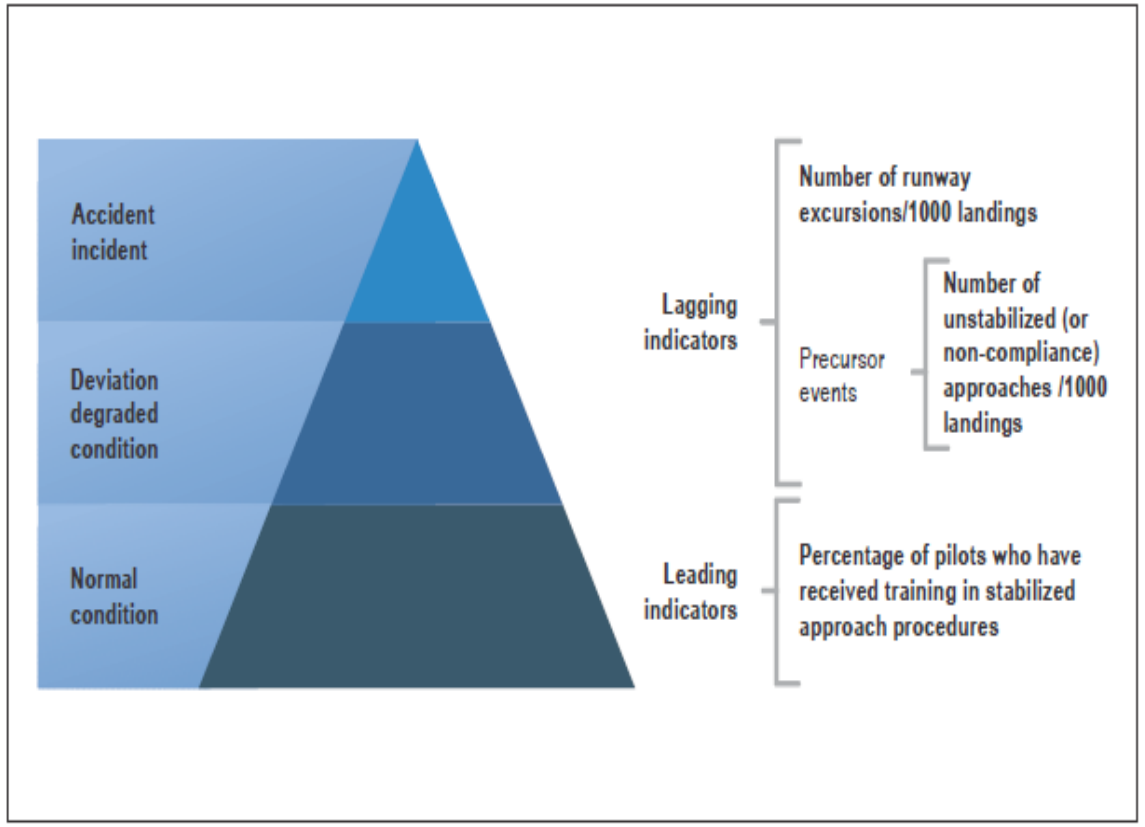
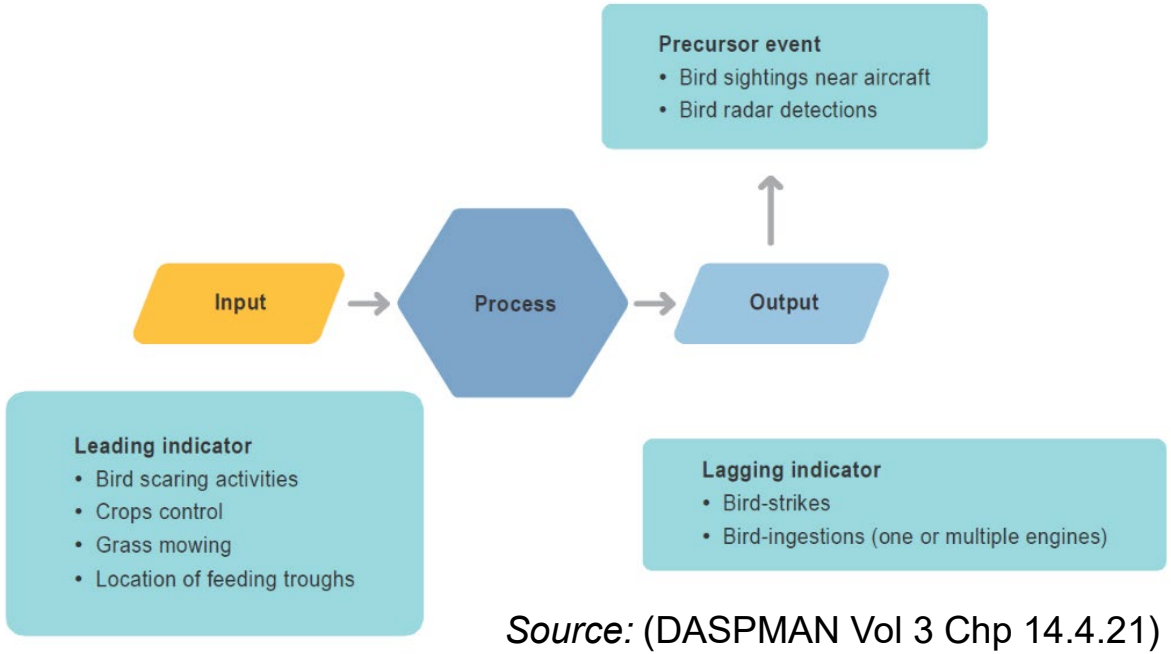


Figure 4-3. Examples of links between lagging and leading indicators

Brief Example

- **Safety Objective**: Reduce bird strikes around the aerodrome
- **Safety Target**: Reduce av strikes by 5% year on year, based on calendar years
- **Safety Indicators**: 1. Lead: Av weekly grass length is <10.0cm (95% confidence)
  2. Lag: Av weekly bird radar concentrations of <100/sq.km
- **Safety criteria**: 1. green <9.0 – amber 9.1-9.9 – red 10.0+
  2. green <90/sq.km – amber 90 – 99.99/sq.km – red 100/sq.km+



Source: (DASPMAN Vol 3 Chp 14.4.21)

Australian Government
Department of Defence
Defence Aviation Safety Authority

Examples

KEY HEALTH INDICATOR TRAFFIC LIGHT BUSINESS RULES

KHI 1. Reporting

1.1 ASR Quantity – All ASRs occurred during Reporting Period

Any CLASS A Events or 2 or more CLASS B Events	Red
Any CLASS B Event	Amber
All CLASS C, CLASS D Events and OPHAZs	Green

1.2 Timeliness – First Release (Occurred Date to Investigating)[1]

7 day release is < 70%	Red
7 day release is ≥ 70% but < 85%	Amber
7 day release is ≥ 85%	Green

1.3 Timeliness – Second Release (Occurred Date to Sign Off)

30 day investigation is < 50%	Red
30 day investigation is ≥ 50% but < 70%	Amber
30 day investigation is ≥ 70%	Green

1.4 Active Investigations > 30 days

30 day Investigation (within limits) is < 50%	Red
30 day Investigation (within limits) is ≥ 50% but < 70%	Amber
30 day Investigation (within limits) is ≥ 70%	Green

1.5 ASR Investigation Quality and completeness

Average Investigation quality and completeness is 0-9	Red
Average Investigation quality and completeness is 10-19	Amber
Average Investigation quality and completeness is 20-30	Green

KHI 2. Culture

2.1 Command Commitment – Aviation Safety Committee Meetings (Quarterly OPS 06-01). Overall metric taken by quarter across 7 units

50% (3 Sqns) of the required Aviation Safety Committee Meetings are held and/or less than 50% are attended by Command	Red
65% (4 Sqns)of the required Aviation Safety Committee Meetings are held and at least 50% are attended by Command	Amber
All Aviation Safety Committee Meetings are held and at least 75% are attended by Command	Green

2.2 Command Commitment – Qualified Aviation Safety Positions

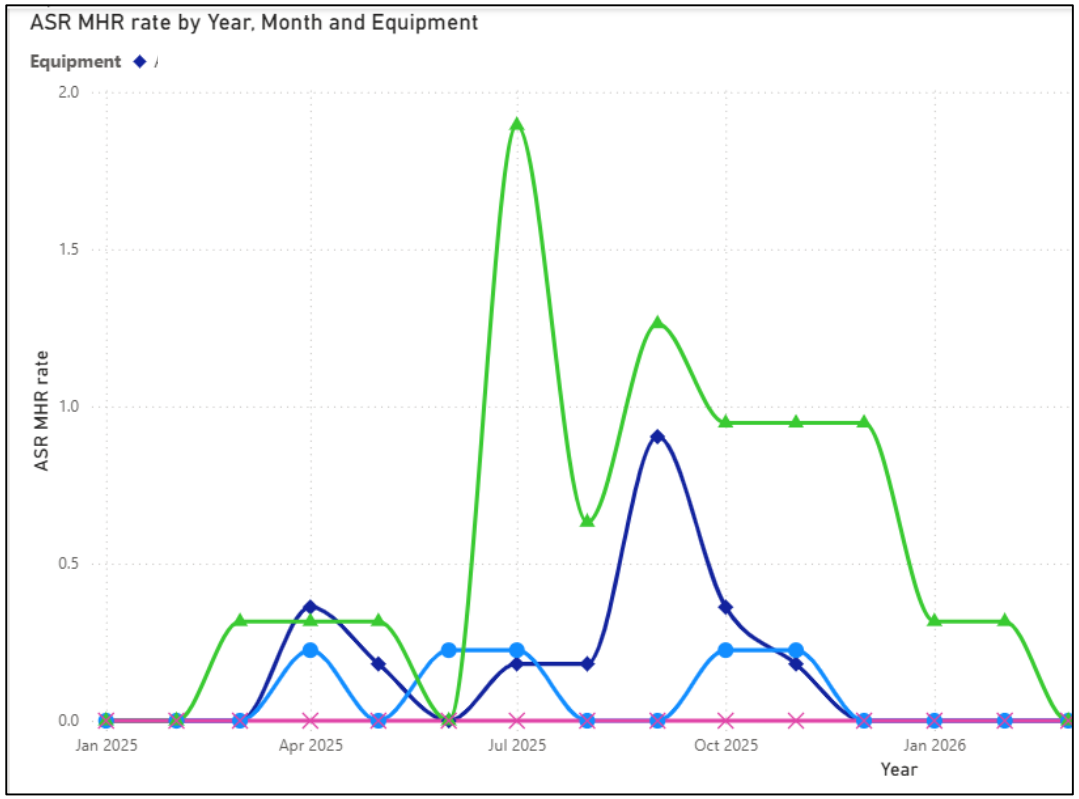
Qualifications iaw DASM

< 50% of Safety positions are filled by qualified personnel	Red
At least 50% of Safety positions are filled by qualified personnel	Amber
All Safety positions are filled by qualified personnel	Green

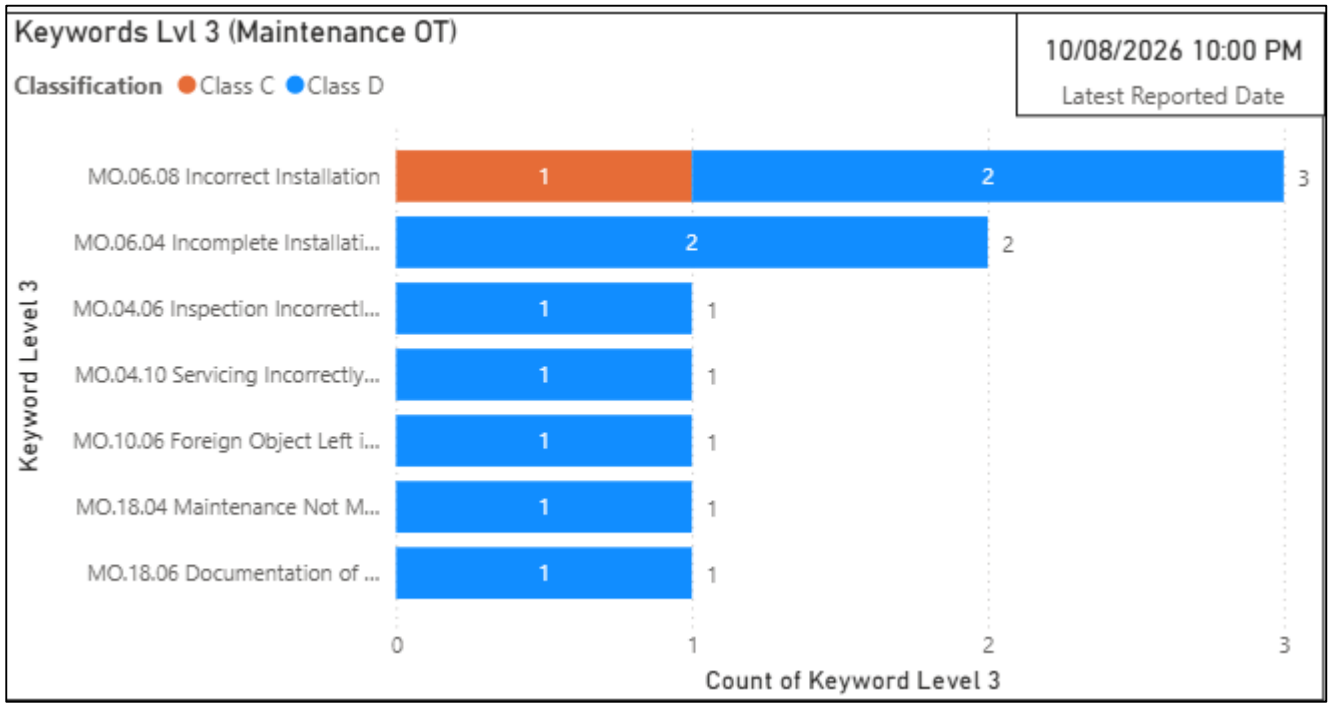
2.3 Command Commitment – Safety Stand Downs IAW OPS 06-01-05[2]. Overall metric taken by quarter across 7 units based on Units Safety Calendars

<75% of Units meeting Safety Stand Down obligation	Red
≥75% and <100% of Units meeting obligations and/or only scheduling one Safety Stand Down	Amber
All units meeting 100% of Safety Stand Down obligation	Green

- **SPI pre-processing.** How can I contextualise the data to improve its relevance?
  - Normalise results – SPIs expressed as rates are always more robust (eg Rate/year, Rate/AFHR or Rate/MHR)
  - Filter & organise occurrence reporting to understand potential process failure.



Here a specific ASR type is normalised per 10,000 maintenance-hours to aid in cross-platform comparison.



Breaking down ASR keywords could provide leading indications of process deficiencies.

Source: (DASPMAN Vol 3 Chp 14.4.19)

Title

SPI No:	Objective Ref:	PI Category:	Version:	Revision Date:
		Safety	1.0	05 Nov 25

Title:

Maintenance Manual Update Timeliness

Safety Objective:

Timeliness of updates to maintenance manuals is highly effective.

Safety Target:

Timeliness of maintenance manual updates achieve an effectiveness of least 5% greater than the Defence average.

- *2025 Target: <30% (ineffectiveness) of maintenance Snapshot respondents*
- *2026 Target: <20% (ineffectiveness) of maintenance Snapshot respondents*

Define Indicators:

Measure and data source is provided through annual workforce survey (Snapshot) facilitated by DFSB.

Criteria Performance Bands:

GREEN: Benchmarked to the average snapshot survey result; to achieve green status the percentage of respondents indicating "*timeliness of updated to technical manuals*" as ineffective must be at least 5% less than the average result.

AMBER: Benchmarked to the average snapshot survey result; to achieve amber status the percentage of respondents indicating "*timeliness of updated to technical manuals*" as ineffective must be plus or minus 5% of the average result.

RED: Benchmarked to the average snapshot survey result; to achieve red status the percentage of respondents indicating "*timeliness of updated to technical manuals*" as ineffective must be more than 5% of the average result.

Units of Measure:	Aggregation Method:
Percent	aintenance respondents

	GREEN	AMBER	RED
	less than the Snapshot Average % value minus 5%.	Snapshot Average % value, plus or minus 5%	Greater than Snapshot Average % value plus 5%

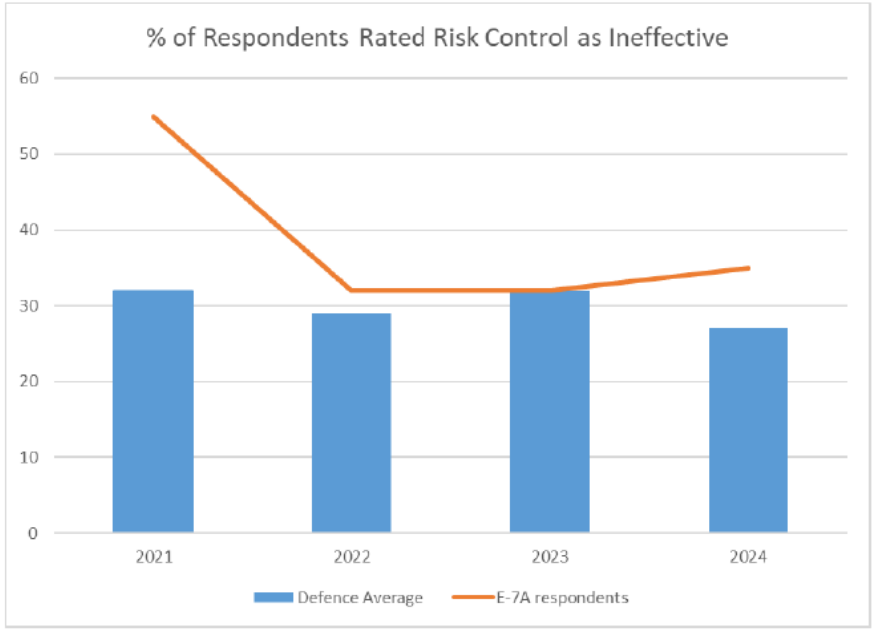
Measurement Attributes:

N/a

Data Source:

FEG-level Snapshot survey report

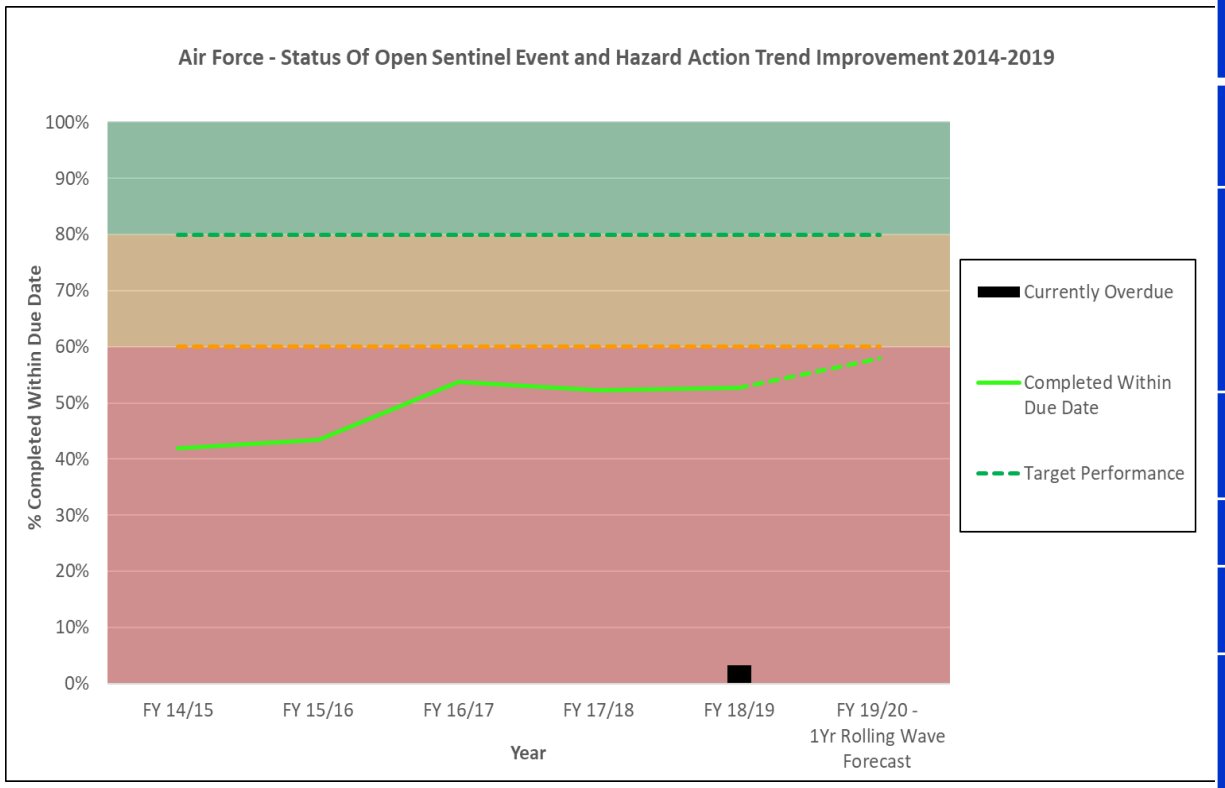
Analysis Guide



	2021	2022	2023	2024
Defence Average	32%	29%	32%	27%
Respondents	55%	32%	32%	35%

This graph provides a graphical summary of trends in maintenance respondents over the last 4 years. Any adverse trend indicates that maintenance are experiencing ineffective updated to maintenance manuals which should be further investigated to determine causal factors.

SPI 6.2 - Air Force – Status of Open Event & Hazard Action Trend Improvement



SPI No. 6.2	Obj: Air Force - Status of Open Event and Hazard Action Closure Trend Improvement	Raised	Jul 19	Status		Trend	↑	Lead/ Lag or Metric	Lag

Safety Behaviour Targeted	• Commanders are actively tracking actions (ie. risk controls) to closure within agreed dates, to assist with reducing risks SFARP
Criteria	• Green Performance: 80%+ of Actions closed within due date, **and** <10% overdue • Amber Performance: 60-80% of Actions closed within due date, **or** 10-30% overdue • Red Performance: <60% of Actions closed within due date, **or** >30% overdue
Discussion	• Closure performance steady and predicted to improve, but still below target • Supervisors/managers not effectively reviewing/managing 'action due' dates
Risk	• Air Force appears not to be meeting ODD obligations

		Data Source	Accountable	Responsible	Due By
Action/s	• Air Command Units to eliminate contributory factors related to not meeting/updating action due dates	STARS	ACAUST	FEGCDRs	Next AFSB
SPI Longevity	• Keep minimum 24 months - improvements under consideration: • Monitor for 'actions' continually extended in Sentinel				

- **SPIs addressing all components of an SMS.** Its hard to explain and justify an outcome if you don't have a whole-of-system view.

Performance Indicator	Target
Number of major risk incidents (as defined in SMS manual)	1 or less
Number of unstable approaches per 1000 landings	2 or less
Percentage of extensions to flight duty periods per month	2%
Number of internal audits (per calendar year)	4
Number of audit findings per audit	2 or less
Number of repeat audit findings	Nil
Number of safety committee meetings (per calendar year)	6
Safety committee attendance of key personnel	Minimum 80%
Number of emergency response planning drills (per calendar year)	1
Number of hazard / safety reports	20 or more
Percentage of staff completed safety training before due dates	95%
Number of safety newsletters issued (per calendar year)	4
Number of formal risk assessments	5 or more
Percentage of changes (organisational/procedural/technical etc.) that have been subject to risk assessment	95%
Number of safety surveys (per calendar year)	1
Number of airworthiness incidents (as defined in SMS manual)	1
Number of flights flown with operational MEL restrictions	3 or less

Source: CASA SMS Booklet 4 – Safety Assurance

Element 3.1

SMS.30 - COMPONENT 3: SAFETY ASSURANCE (AUS)

(a) The Authorised Organisation must conduct safety assurance using artefacts documenting the following SMS elements:

1. **Element 3.1:** Safety performance monitoring and measurement.

   a. The organisation must implement safety performance monitoring and measurement to validate and improve the effectiveness of the safety risk controls. ▾ **AMC**

Monitor/measure risk control effectiveness

AMC SMS.30(a)1 - Safety performance monitoring and measurement (AUS)

a. The organisation should:

i. monitor, measure and verify safety performance

Monitor/measure all SMS Components/Elements

ii. periodically review and update safety objectives, safety targets and safety performance indicators

Monitor/measure objectives

iii. analyse Aviation Safety data

Demonstrate aviation safety data being used / analysed

iv. include Aviation Safety survey programs

Snapshot. Then internally generated surveys

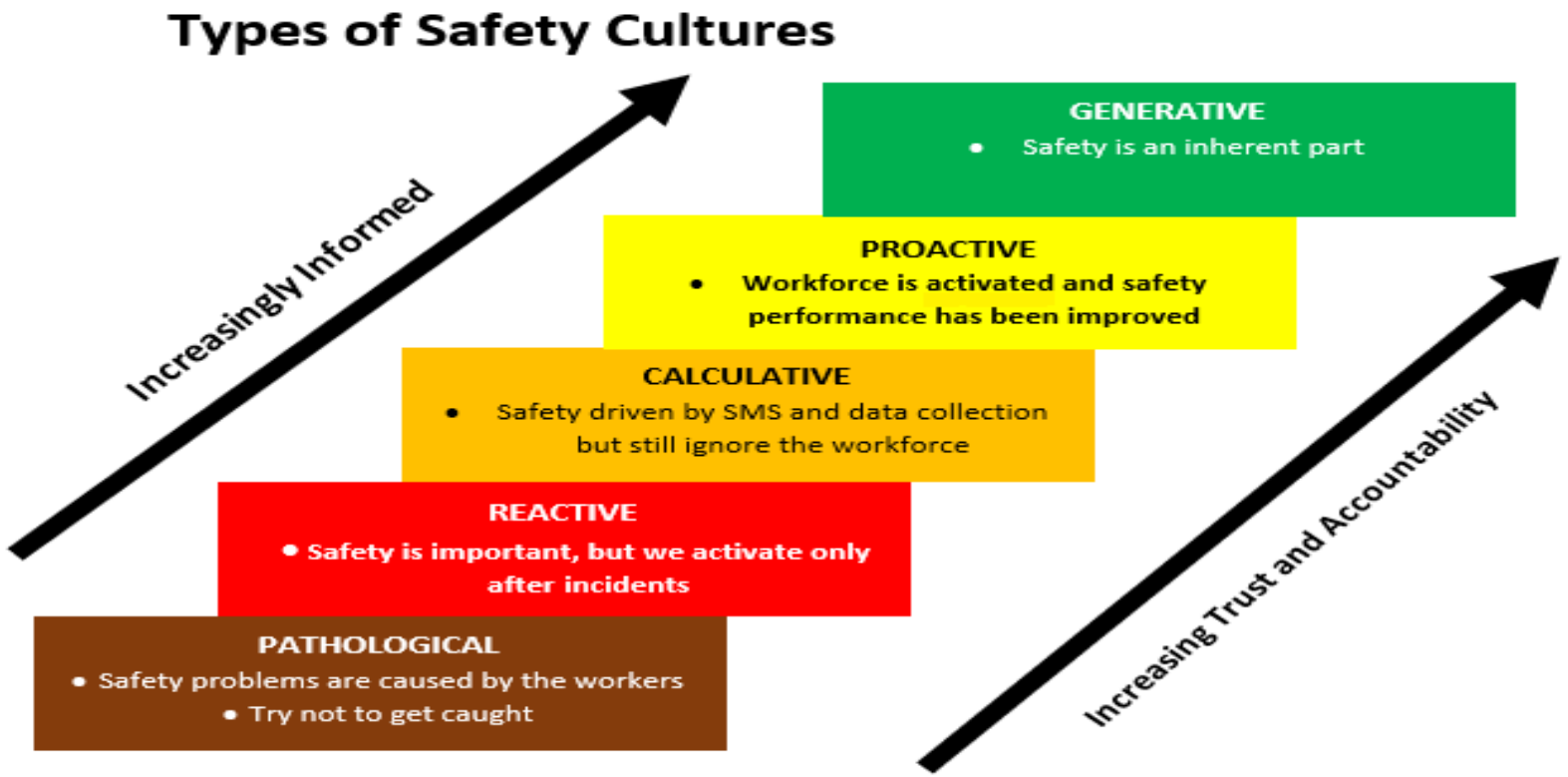
v. periodically conduct safety audits.

Use your QMS to assess SMS component/element with rectifications fed back into SMS.
Also provides inputs into monitor/measure of safety performance.

Effective Safety Performance = Improved Safety Culture

- Safety Performance Management = Acquisition, analysis and distribution of Safety Information.
- **Effective handling, processing and actioning of safety information** is a critical requirement for a Generative Safety Culture.

Improved Awareness leads to **Informed risk-based Decisions** & better **Control Measures**



Conclusion

- Effective SPIs follow a formal design process.
- Measure effectiveness, not ‘activity’.
- Inform performance of all SMS elements.
- Inform effectiveness of risk controls.
- Provide assurance that organisation’s most critical risks are managed.

References

- DASR SMS.30(a)1 Element 3.1 - *Safety performance monitoring and measurement*
- DASPMAN Vol 3 Chp 14 – DASR SMS *Safety Performance Indicators*
- ICAO Annex 19, 3rd Edition – Link
- ICAO DOC9859, 4th Edition, Chapter 4 – Link
- ICAO Doc 10004, Global Aviation Safety Plan 26-28 Edition – Link
- Work Health and Safety Regulation 2011 (Cth) – Link
- Australian Institute of Health & Safety. Are boards losing patience with lag-indicator safety reports? Published August 2026. Based on commentary from Cilla Robinson, Partner, King & Wood Mallesons.
- CASA SMS resource kit – Booklet 4 – Safety Assurance - Link

Australian Government
Department of Defence
Defence Aviation Safety Authority

QUESTIONS

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Update – Aggregation of Risks

AMC1 SMS.20(a)2 - Safety Risk Assessment and mitigation (for ADF Organisations) (AUS)

a. **Risk assessment and mitigation.** ADF organisation's Risk Management (RM) approach must include:

i. Risk Management processes that: …

(g) continuously monitors and reviews risk, including: …

(ii) aggregation of risks.

Key Points:

1. **Hazard Identification and Risk Assessment**
   - ***Effective risk controls***
     - Identification of common risk control across multiple Hazards
     - Identification of the critical control or single point of failure

2. **Part of the SRM Step 7, Continuous Risk Monitoring & Review:**
   - ***Overlaps with:*** Management of Change, Safety Performance, Continuous Improvement, ASR & Aviation Issue management.

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Next DAVNOPS Webinar – 25 September 2026

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