



EASA

European Aviation Safety Agency

Eye opener: Implementation issues in the industry

CAMO SMS Workshop

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Your safety is our mission.

An agency of the European Union 



Learn from experience

Reduced ability to learn from experience

- 'time to market' for new products has greatly decreased
- the number of accidents to learn from continues to decrease





Changing nature of accident



- less 'common causes' – more 'random causes': causes becoming more unique to given operators, aircraft, events, regions, etc.
- fewer accidents are related to broadly distributed exposure factors.



Regulators

Evolve towards performance based oversight

- Integrate and harmonize SMS oversight across the regulatory oversight departments,
- Develop methodologies for performance based oversight , including ability to assess SMS effectiveness
- Develop methodologies for risk-based resource targeting /planning.

Ensure the right inspector skills and competencies are available:

- understanding of how to analyze systemic failures rather than individual non-compliances
- Ensure buy-in from inspectors to get them to accept that change is needed

Develop inspector skills and competence to assess

- different degrees of maturity,
- 'intangibles' such as safety culture,
- the pertinence of safety risk assessment performed by organisations
- the relevance of safety performance indicators (SPIs) developed by organisations.

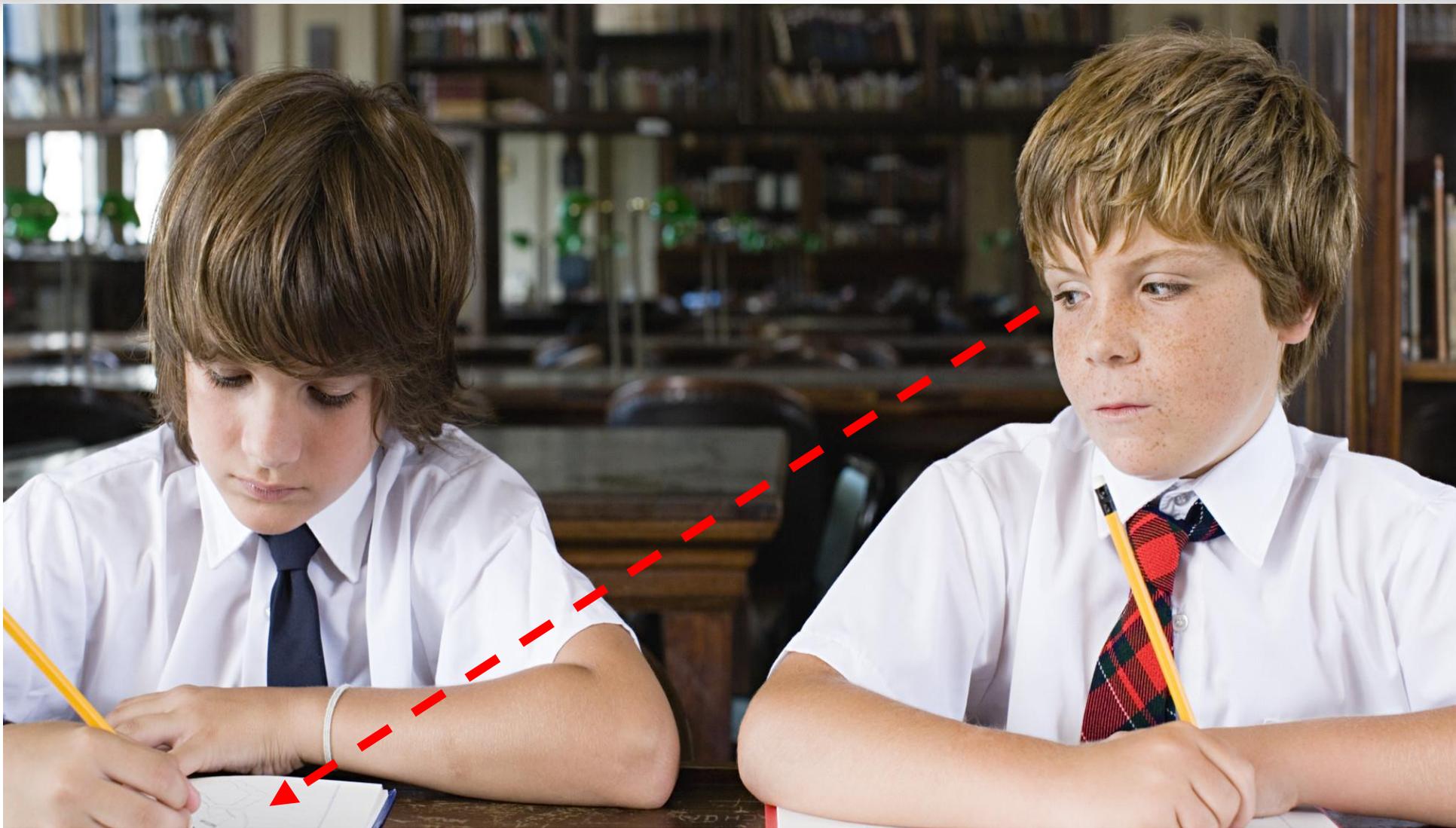


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FINDINGS

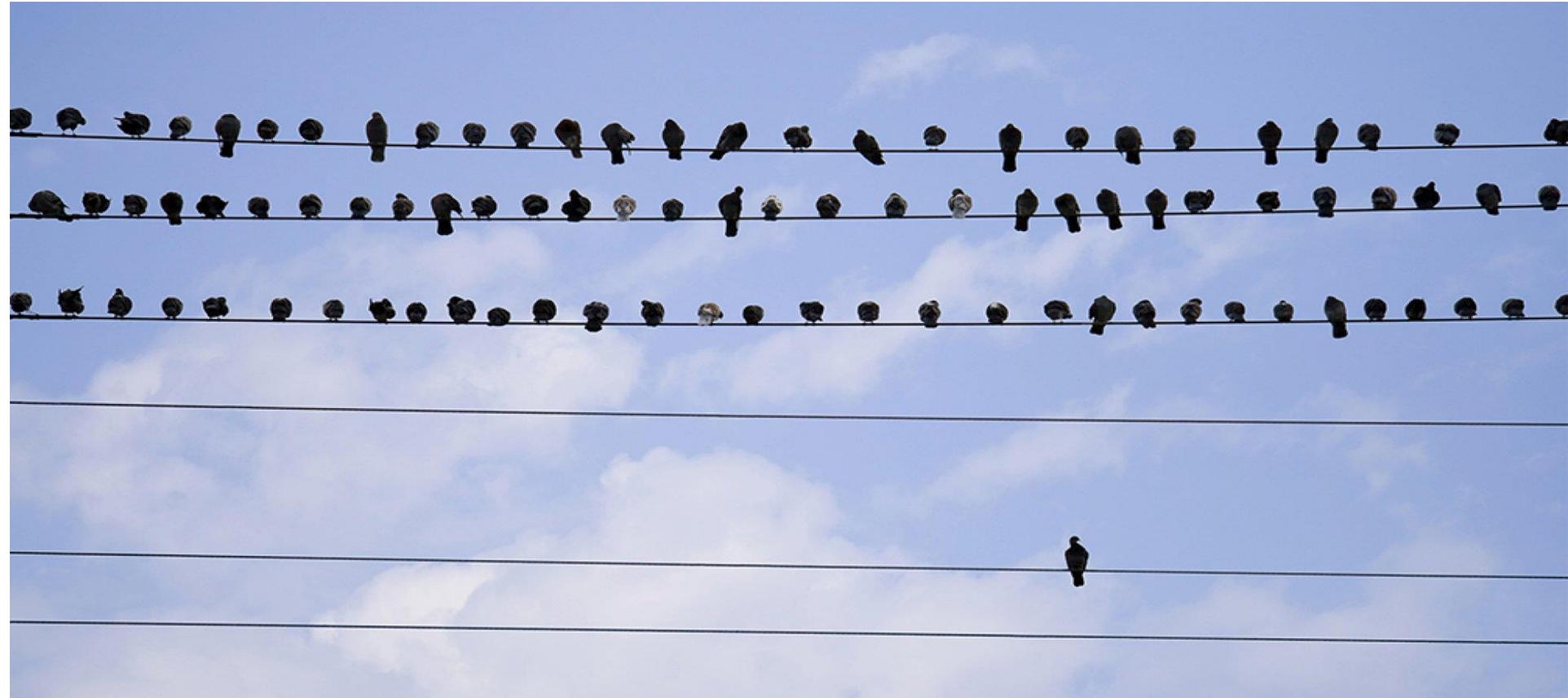


Management System Manual characteristics





Customer Satisfaction Metrics





Assign responsibility for implementing and monitoring the control

WHO'S IN CHARGE





RISK ASSESSMENT COMPLEXITY

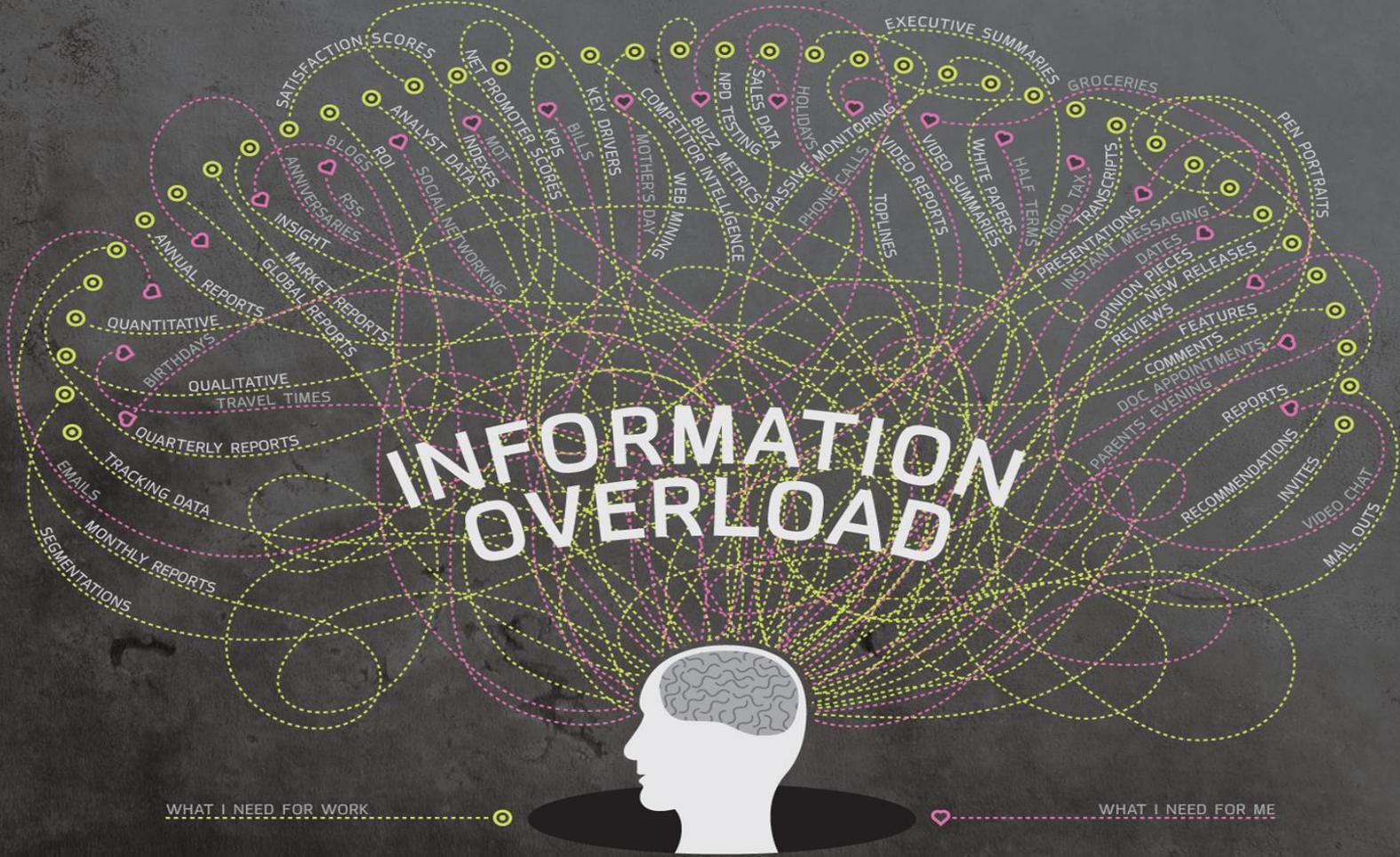




Classic Matrix

Risk probability	Risk severity				
	Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Frequent 5	5A	5B	5C	5D	5E
Occasional 4	4A	4B	4C	4D	4E
Remote 3	3A	3B	3C	3D	3E
Improbable 2	2A	2B	2C	2D	2E
Extremely improbable 1	1A	1B	1C	1D	1E

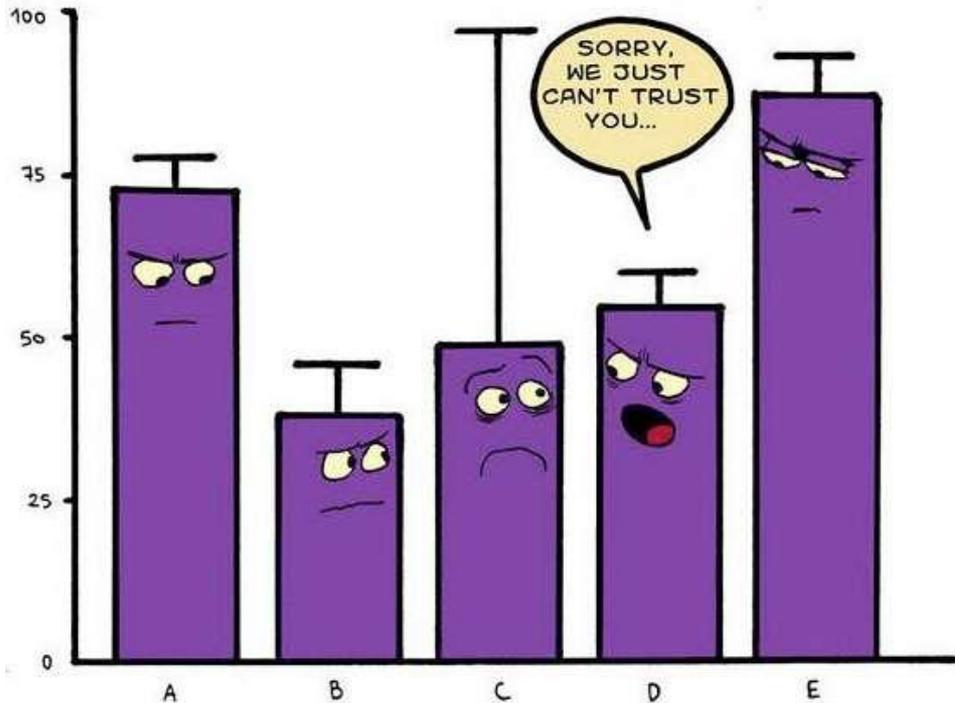
Suggested criteria	Assessment risk index	Suggested criteria
Intolerable region	5A, 5B, 5C, 4A, 4B, 3A	Unacceptable under the existing circumstances
Tolerable region	5D, 5E, 4C, 4D, 4E, 3B, 3C, 3D, 2A, 2B, 2C	Acceptable based on risk mitigation. It may require management decision.
Acceptable region	3E, 2D, 2E, 1A, 1B, 1C, 1D, 1E	Acceptable



WHAT I NEED FOR WORK

WHAT I NEED FOR ME





- What do we want to know and why?
- What should a good SPI deliver?
- What are the determinants of a good SPI?
- Which SPI are required?
- How will the information gained be used?

SPI SHOULD REFLECT YOUR RISKS



Data should be: valid, complete, consistent and accurate

Be pragmatic.

Be mindful of the limitations of your data, but make the most of what you have available!

Intercept the precursors rather than measuring the events.

EASA

EXPECTATIONS



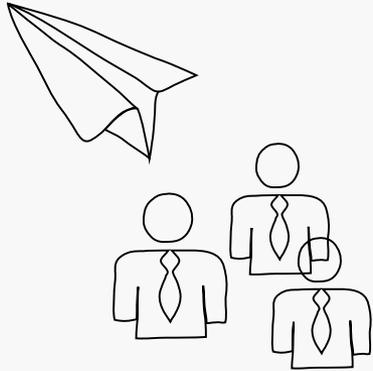


Operators / Organizations

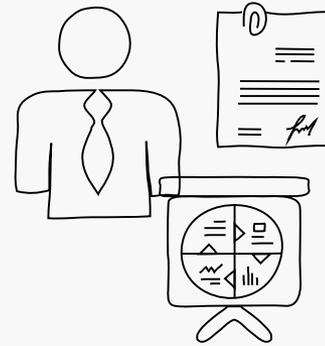
- ❑ Nominated persons role within Management System
- ❑ Prioritization of risks
- ❑ Accountable Manager awareness
- ❑ Organization involvement in Management System activities



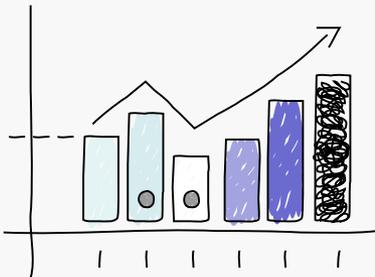
Issues with Industry



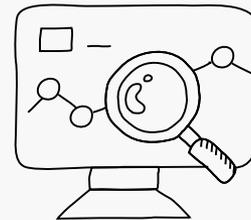
AIRLINE
MANAGEMENT
UNWILLINGNESS
TO TAKE REAL
SAFETY
ACCOUNTABILITY



POOR SAFETY
MANAGER
QUALIFICATION &
COMPETENCE
(AND LINE
MANAGERS)



INADEQUATE RISK
MANAGEMENT
PROCESSES,
LEADING TO
QUESTIONABLE
ASSESSMENTS



INADEQUATE
MONITORING OF
RISK MITIGATIONS



Issues with the authority

1

LACK OF UNDERSTANDING ON HOW SAFETY RISK MANAGEMENT SHOULD WORK

2

INSPECTORS NOT HOLDING APPROPRIATE SKILLS TO ASSESS OPERATOR'S SRM

3

ACCEPTANCE OF „WEAK“ SAFETY MANAGERS

4

„LIGHT“ CHALLENGING OF OPERATORS' SAFETY RISK MANAGEMENT OUTPUT



Root causes/Challenges

1.

UNCLEAR LINES OF “REAL” RESPONSIBILITY & **ACCOUNTABILITY** THROUGHOUT THE OPERATOR

2.

PERCEPTION THAT SRM IS A REQUIREMENT TO BE MERELY **“TICKED”**

3.

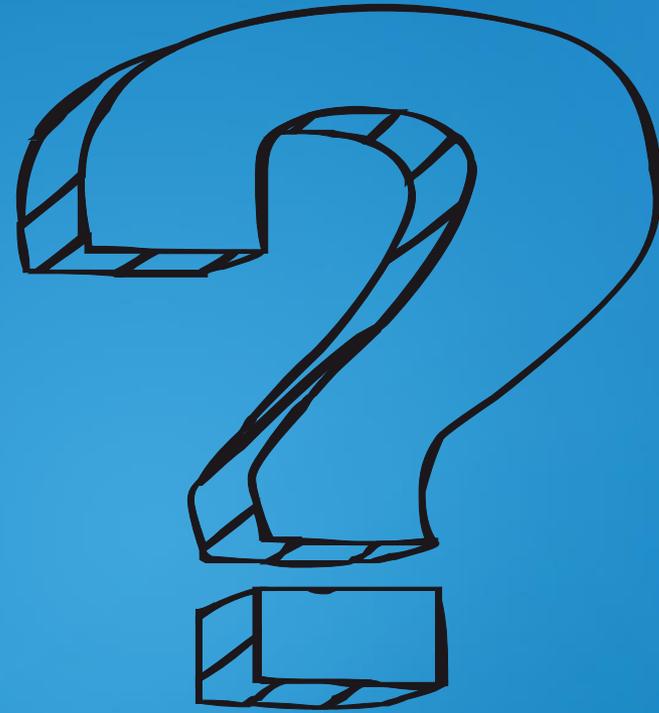
LACK OF EFFECTIVE NAA **OVERSIGHT**/ASSESSMENT

4.

LACK OF QUALIFICATION/**COMPETENCE** CRITERIA FOR SAFETY MANAGERS AND LINE MANAGERS WITH REGARD TO **SRM**



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