Rail Accident Investigation Branch

The investigation of organisational factors

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Introduction

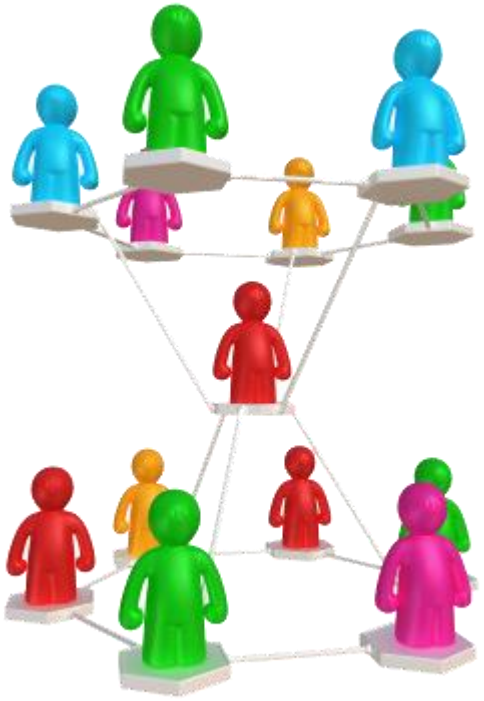
This presentation will cover:

- what is meant by organisational factors?
- the benefits of good investigation of the underlying organisational factors
- the barriers to achieving this
- a suggested approach
- key questions to be answered by the investigator

What are ‘organisational factors’?

The term ‘organisational factors’ encompass all those elements that influenced the way that the organisation, and everybody within it, behaved. Typically these elements include:

- formal management systems (eg safety and competence management)
- assurance processes (monitoring, audit and review)
- working practices, whether or not formally documented
- risk awareness
- how the organisation learnt from experience
- organisational safety culture (next slide)



What is organisational safety culture?

- For James Reason, a strong safety culture is:
  - an informed culture
  - a reporting culture
  - a learning culture
  - a flexible culture
  - a just culture

Safety culture and Safety Management Systems

- SMS and safety culture are not interchangeable
- However, research suggests a positive link between a developed SMS and good safety performance
- Deficiencies in the SMS may indicate issues with the wider organisational culture

Why investigate organisational factors?

In order to fully understand the causes of an accident it is necessary to examine the organisational factors that created the conditions for it to occur

Why investigate organisational factors?

Good investigation of organisational factors will make a major contribution to establishing a robust and vibrant safety culture

- Encourage reporting
- Provides source of business information
- Demonstrate willingness to learn from experience
- Demonstrates a commitment to achieving a just culture

The barriers to proper investigation of organisational factors

- Perception that organisational factors are difficult to evidence
- ‘Too close to home’
- May examine the actions of those who commissioned the investigation
- Lack of empowerment
- Insufficient analysis
- No clearly defined methodology
- Confusion over terminology

Breaking through the barriers

- Remits and scope of investigations
- Competence and independence and empowerment of investigators
- Busting the mystique
- Guidance on methodology
  - terminology
  - sources of evidence
  - applying standard analytical techniques, but looking deeper

Investigation of organisational factors – some sources of evidence

- Outputs of the management assurance system
- Management papers, correspondence, minutes of meetings etc
- Data showing the extent of reporting of previous safety incidents
- Formal evaluations of safety management performance (pre-accident)
- Group interviews/discussions at working level

A simple model for the investigation of safety management systems and safety culture (1)

Causal factors can include issues such as:

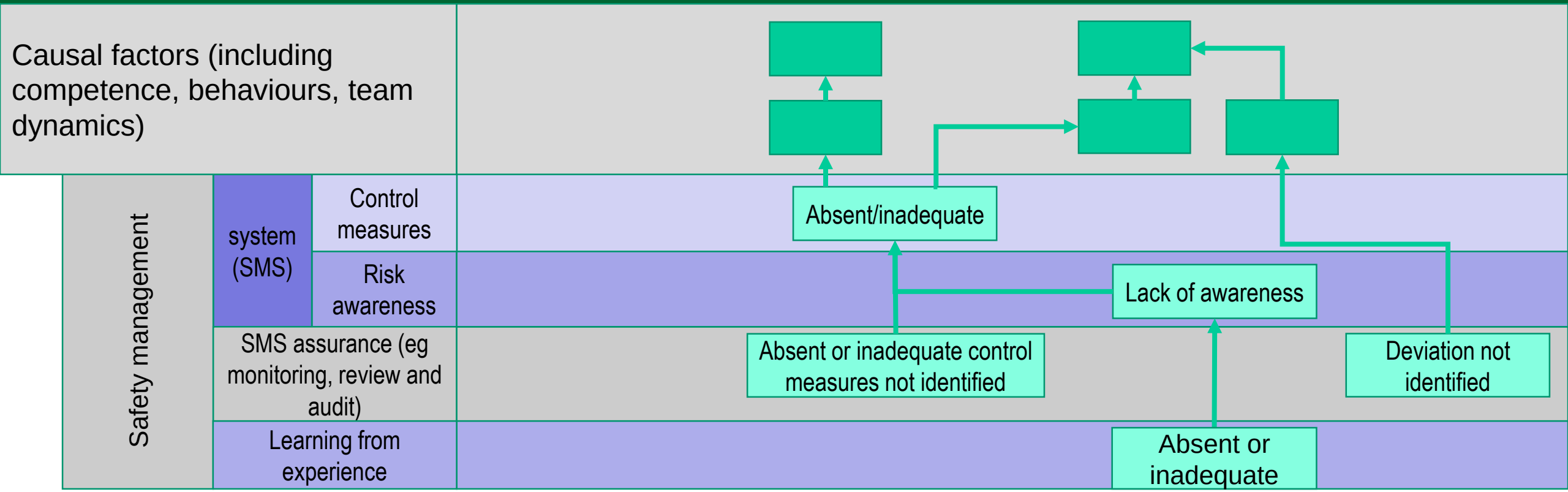
- competence
- behaviours (individual and group)
- team dynamics
- leadership

How does the organisation normally achieve safe outcomes?

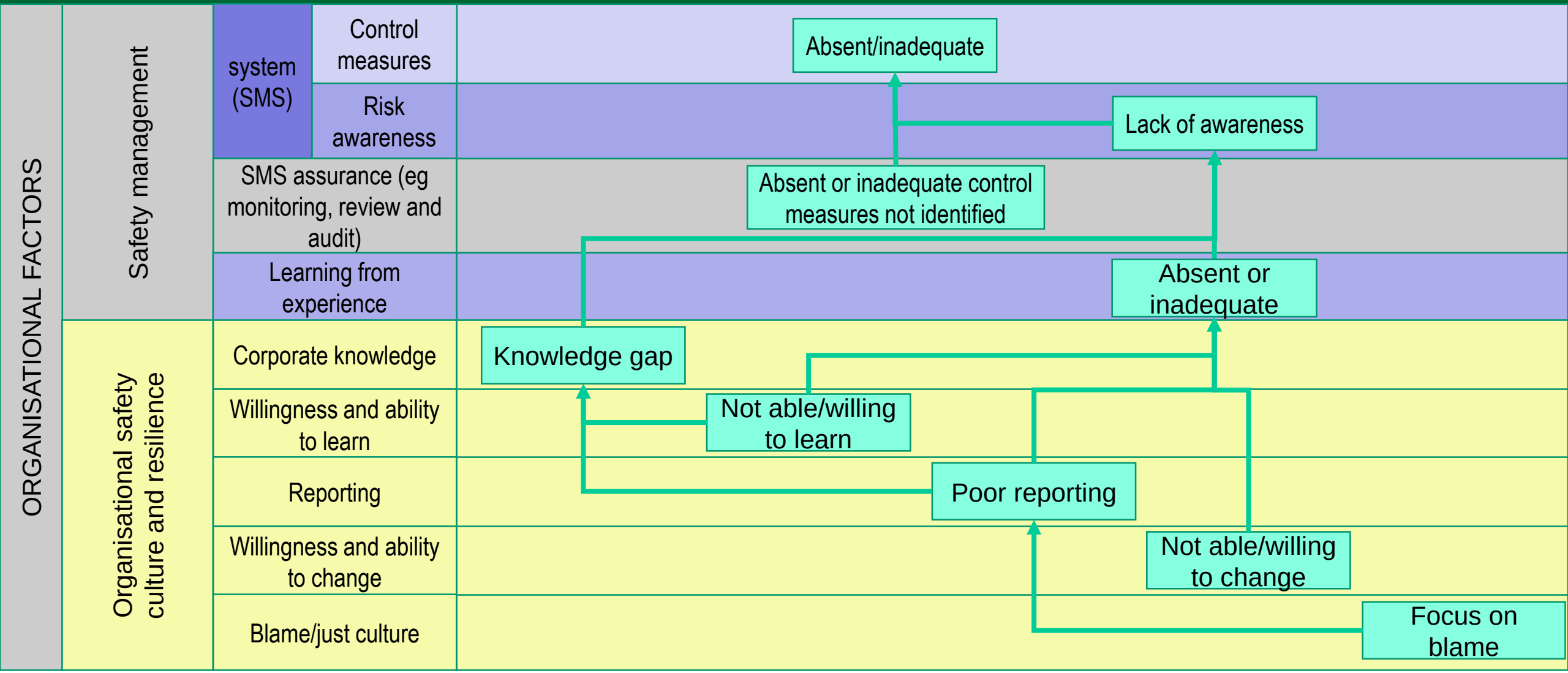
Failed barriers

- missing/weak barriers
- barriers not implemented as intended

A simple model for the investigation of safety management systems and safety culture (2)



A simple model for the investigation of safety management systems and safety culture (3)



Investigation of organisational factors – the five key questions

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1

What were the relevant control measures?
How were they documented, understood and applied?

Control measures were absent, inadequate, or not properly applied

Investigation of organisational factors – the five key questions

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2

To what extent were the hazards and associated risk understood?

Hazards had not been identified and/or the risk was not understood

Investigation of organisational factors – the five key questions

3

What mechanisms were in place to monitor and review the efficacy of the SMS?

The organisation had not recognised that its control measures were deficient, or had failed to detect that they were not being correctly applied

Investigation of organisational factors – the five key questions

4

How did the organisation learn from previous experience, and then use that experience to improve its safety arrangements?

The organisation had not learnt lessons from previous experience, or had not taken previous learning into account

Investigation of organisational factors – the five key questions

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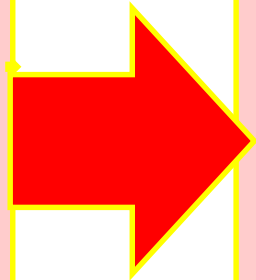
To what extent were safety issues being reported and actioned?

Did employees feel empowered to report safety issues, particularly those relating to their own mistakes or errors, without fear of unjust repercussions



Evidence of a blame culture

Questions?

Thank you for your attention