

ORR protects the interests of rail and road users, improving the safety, value and performance of railways and roads today and in the future



RM³ Workshop

York

2nd December 2019

RM³ York Workshop Agenda

09:30-10:00 Registration, welcome tea / coffee

10:00-10:15 Opening Introduction to workshop

10:15-10:50 LNER Presentation

10:50-11:25 RSSB Taking Safe Decisions and RM³ Presentation

11:25-12:00 ORR RM³ Presentation

12:00-12:45 Lunch and networking opportunity

12:45-16:15 RM³ practical application training

(tea / coffee break at 15:00-15:15)

16:15-16:45 Wash up and group discussion

16:45-17:00 Closing discussion and end of workshop

Welcome Address

Jen Ablitt

Deputy Director, Safety Strategy, Policy and Planning
Head of UK Delegation to Channel Tunnel Safety Authority

Chair of the joint ORR / Rail Industry RM³ Governance Board

The next presentation is
LNER
Please wait while we change presenters

LNER Presentation

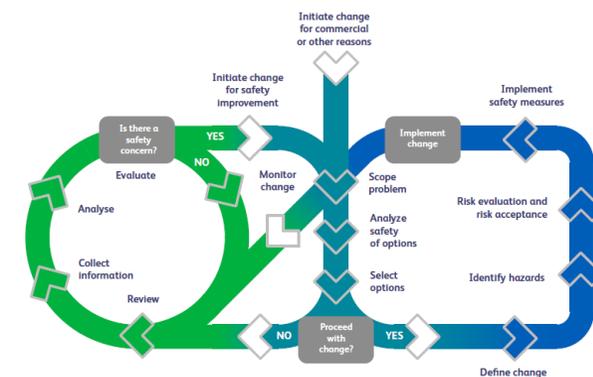
The next presentation is from
RSSB
Please wait while we change presenters

Taking Safe Decisions and RM3



December 2019

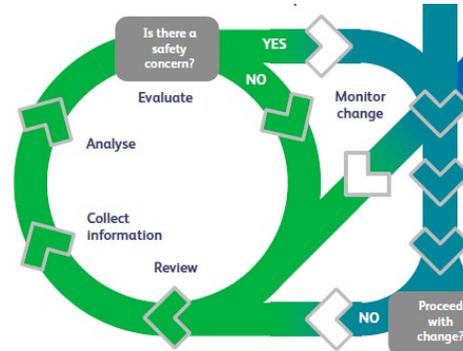
Ben Gilmartin
Lead System Safety Engineer



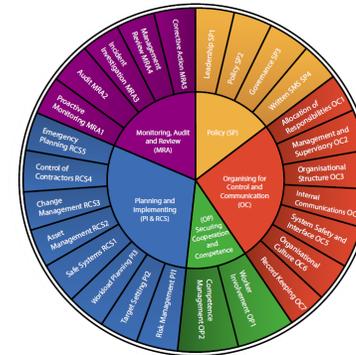
A short introduction to Taking Safe Decisions



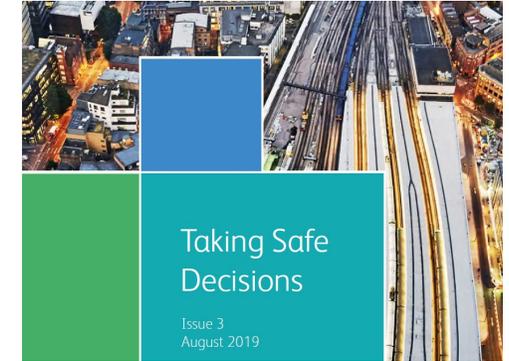
- RM3 & Taking Safe Decisions
 - Introduction
 - Taking Safe Decisions & RM3



- Taking Safe Decisions
 - Document structure
 - The Taking Safe Decisions framework



- RM3 & Taking Safe Decisions
 - Questions
 - Over to you...



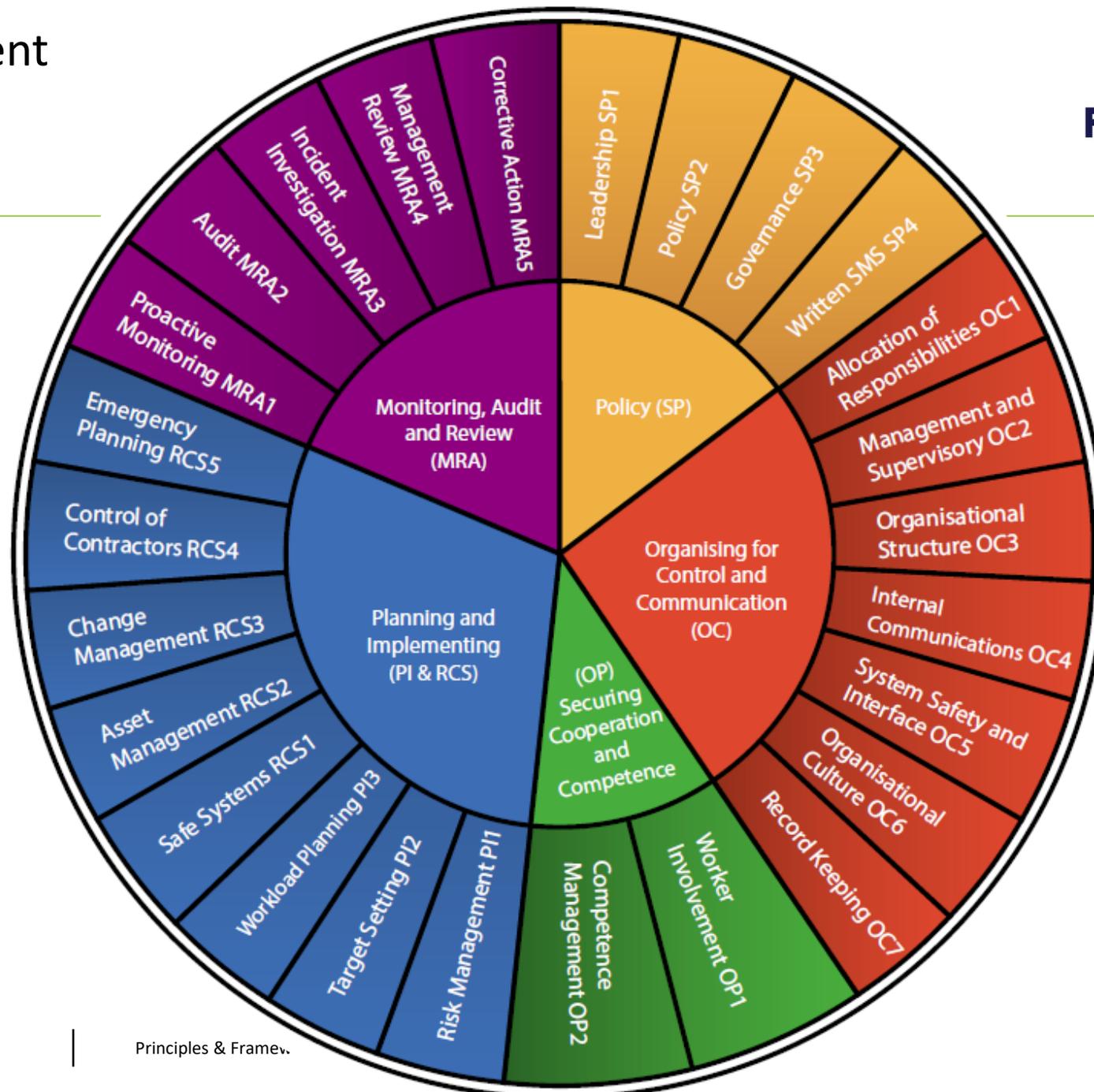
- Taking Safe Decisions
 - Where to go for further help

Risk Management Maturity Model (RM3)

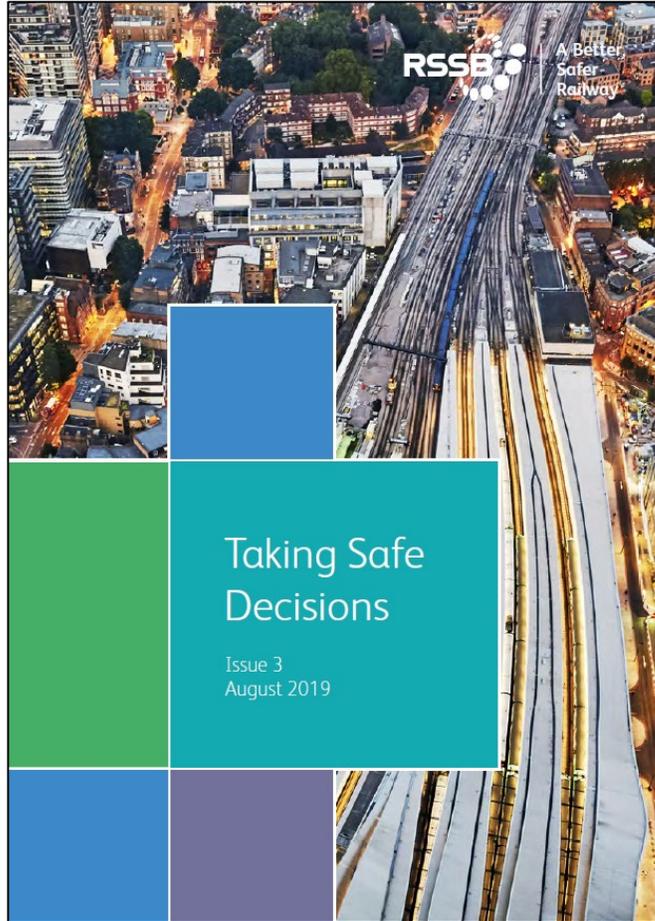
5 sections

26 elements

5 maturity levels

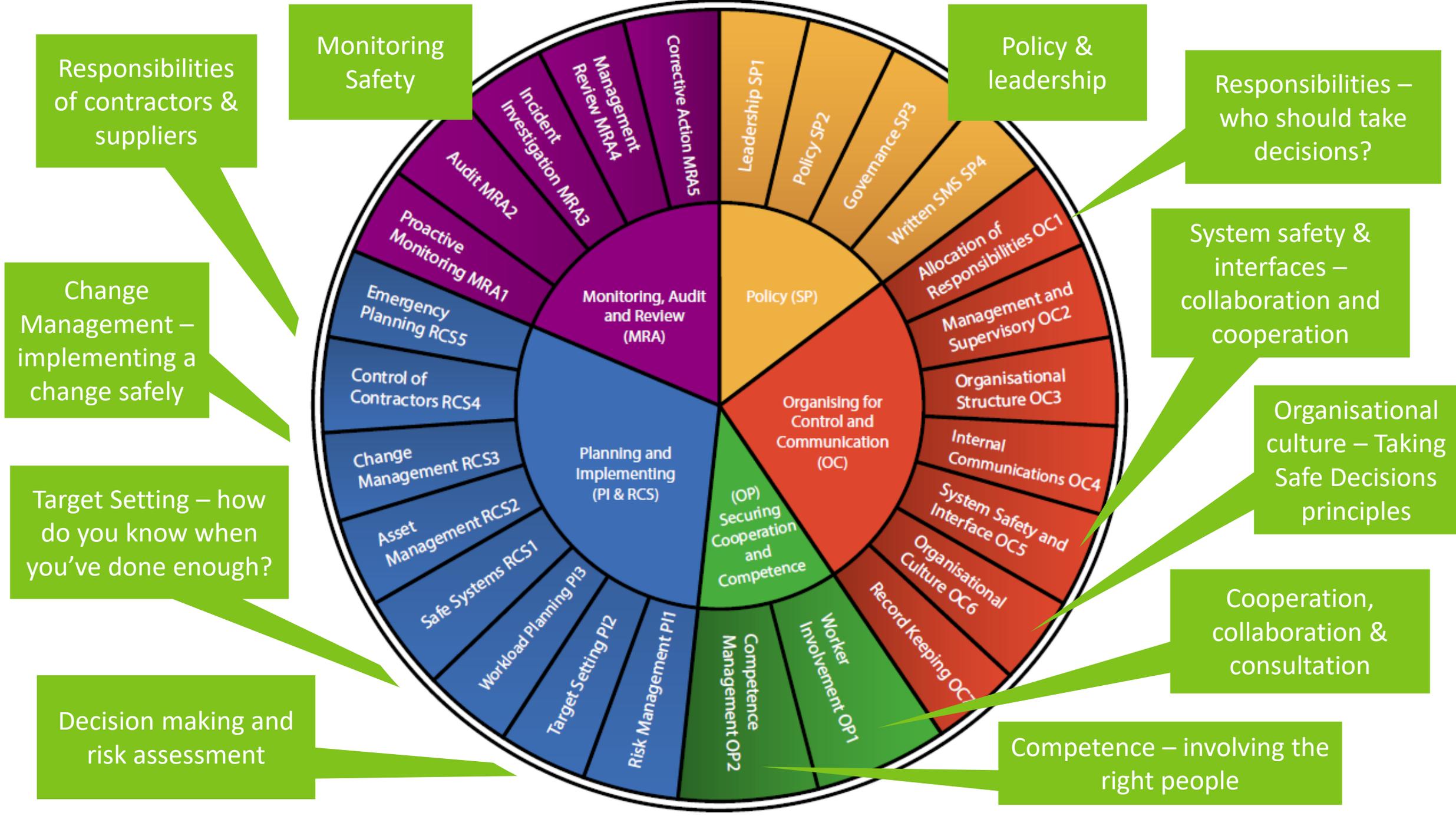


Risk Management Maturity Model (RM3) & Taking Safe Decisions



?





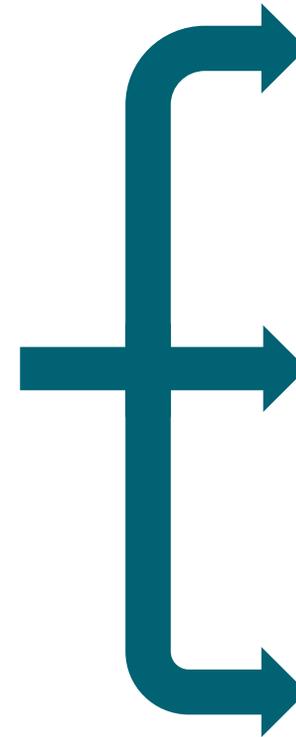
Taking Safe Decisions – what’s it all about?

How to go about making decisions in the right way...

- protect safety
- risk-based
- satisfy the law
- commercially sound



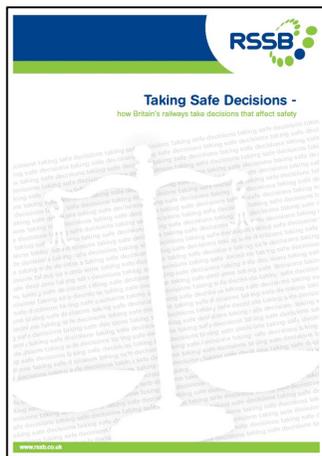
- rational
- equitable
- defensible



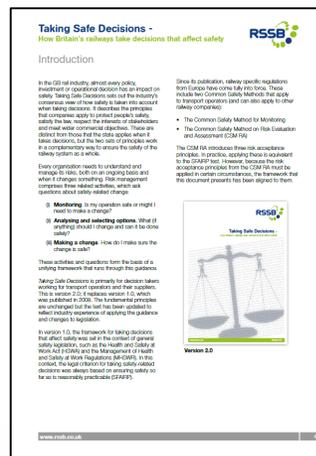
passengers	
staff	
public	

Taking Safe Decisions – what’s new in 2019?

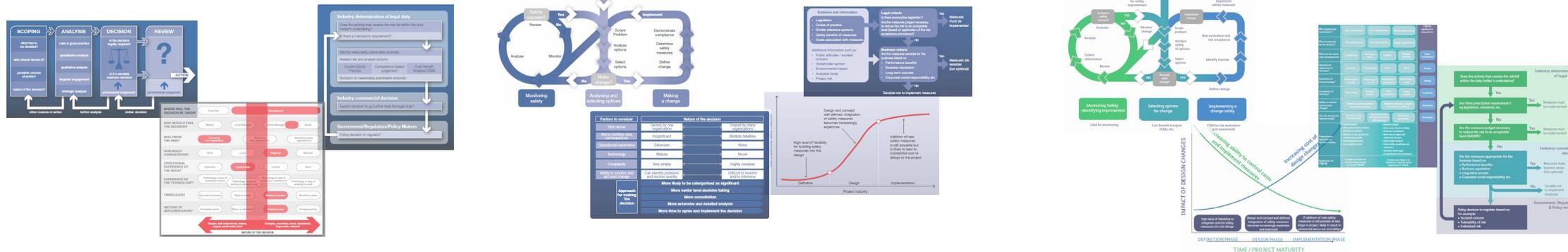
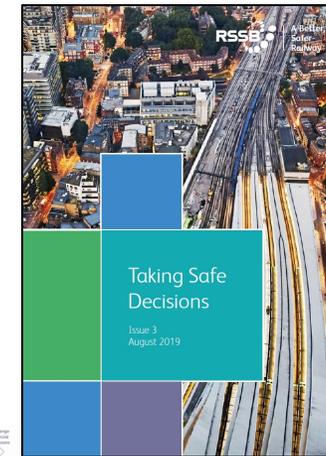
2008



2014



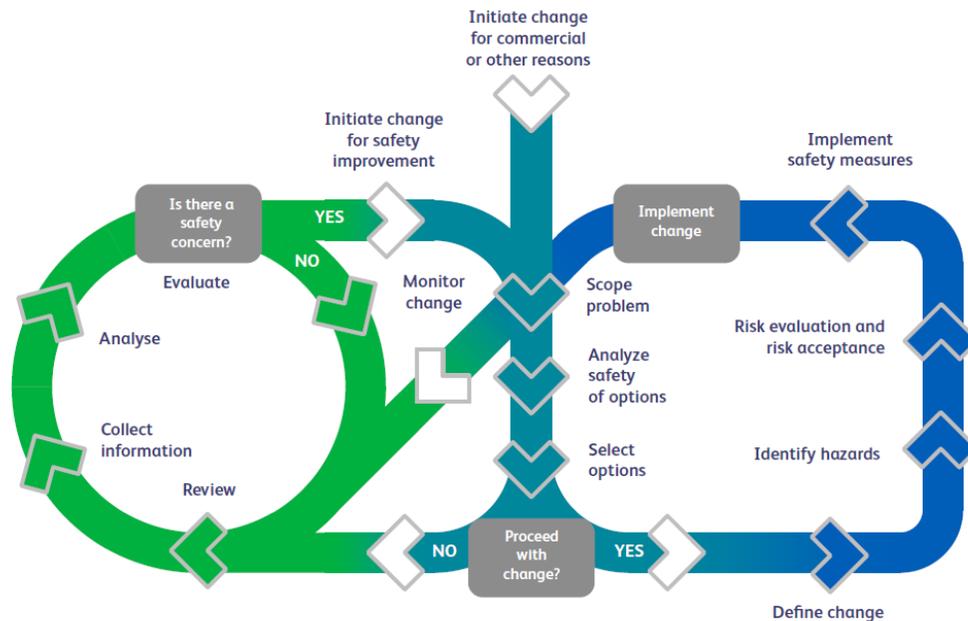
2019



The underlying principles remain fundamentally unchanged

Taking Safe Decisions 2019 - structure

PART 1 The Taking Safe Decisions framework



Monitoring Safety
- Identifying improvement

CSM for monitoring

Selecting options
for change

Cost Benefit Analysis
(CBA), etc.

Implementing a
change safely

CSM for risk evaluation
and assessment

What?

PART 2
What are your legal responsibilities for safety risk?

When?

PART 3
When should decisions be taken?

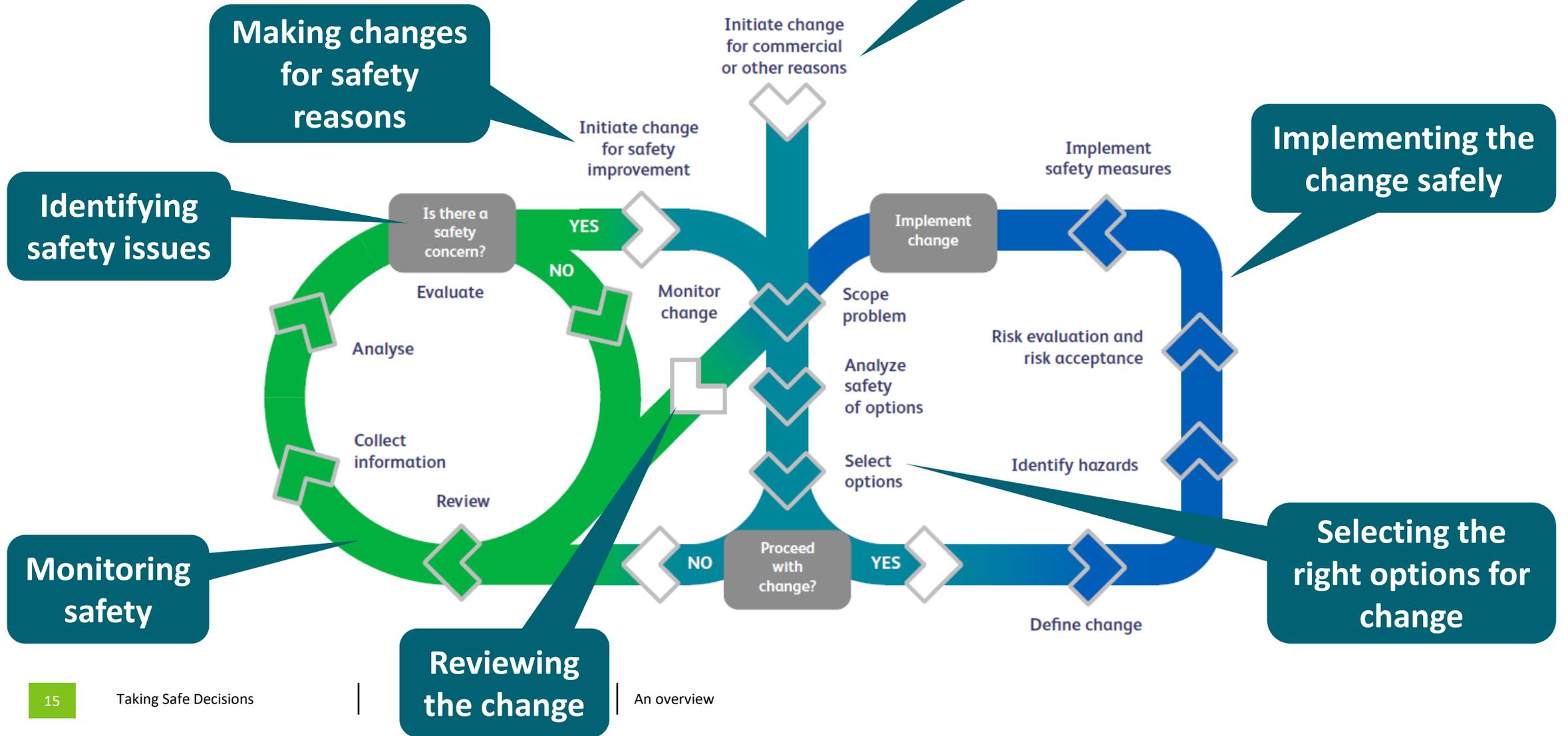
Who?

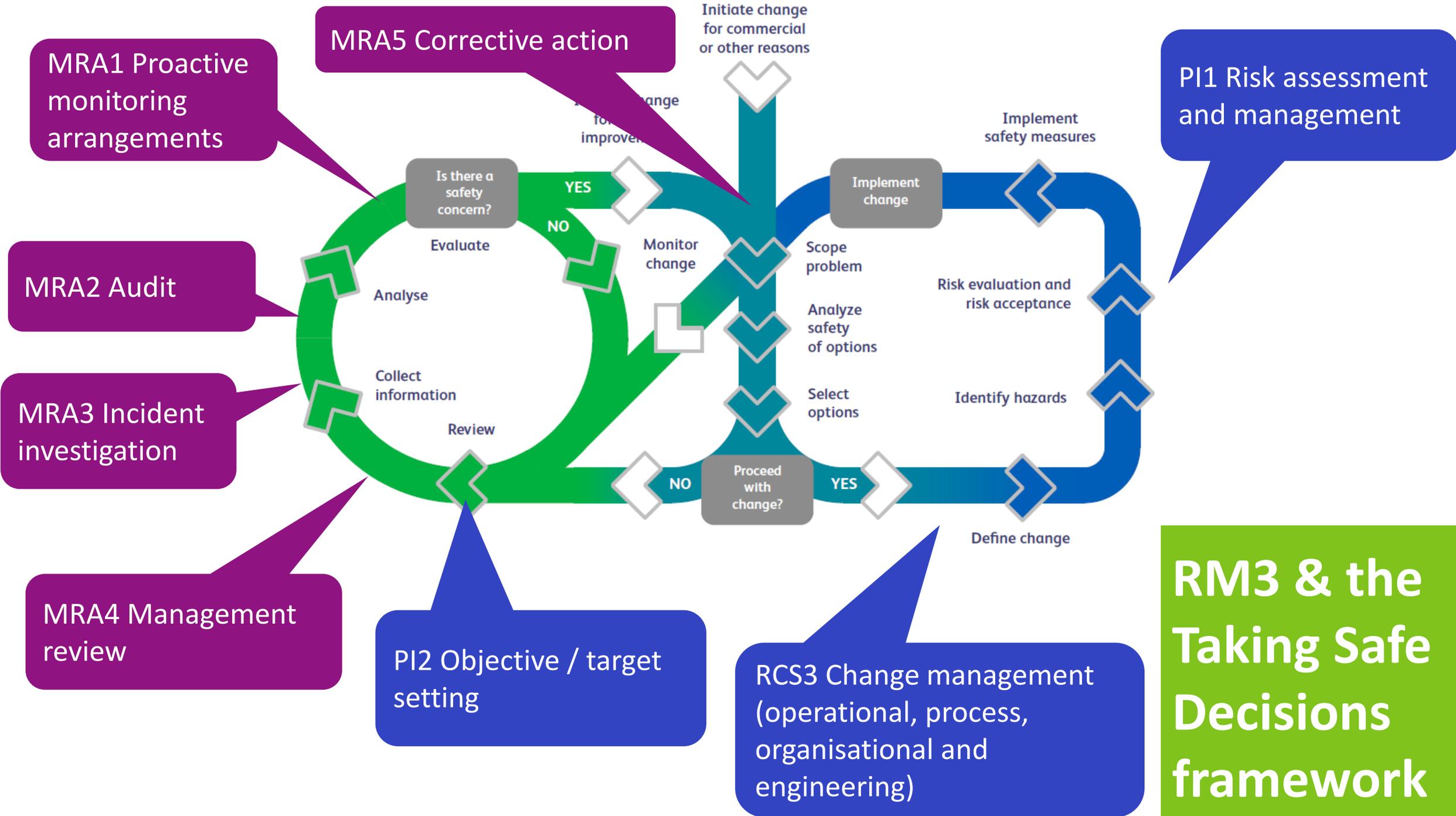
PART 4
Who should take decisions?

How?

PART 5
How should decisions be taken?

PART 1 - The Taking Safe Decisions framework





MRA1 Proactive monitoring arrangements

MRA5 Corrective action

MRA2 Audit

MRA3 Incident investigation

MRA4 Management review

PI2 Objective / target setting

PI1 Risk assessment and management

RCS3 Change management (operational, process, organisational and engineering)

RM3 & the Taking Safe Decisions framework

Taking Safe Decisions & RM3

RM3 elements related to Taking Safe Decisions framework

- PI1 Risk assessment and management
- PI2 Objective / target setting
- RCS3 Change management (operational, process, organisational and engineering)
- MRA1 Proactive monitoring arrangements
- MRA2 Audit
- MRA3 Incident investigation
- MRA4 Management review
- MRA5 Corrective action

RM3 elements related to Taking Safe Decisions principles

- SP Policy, leadership and governance
- SP4 Written safety management system
- OC1 Allocation of responsibilities
- OC5 System safety and interface arrangements
- OC6 Organisational culture
- OP1 Worker involvement and internal co-operation
- OP2 Competence management system
- RCS4 Control of contractors and suppliers





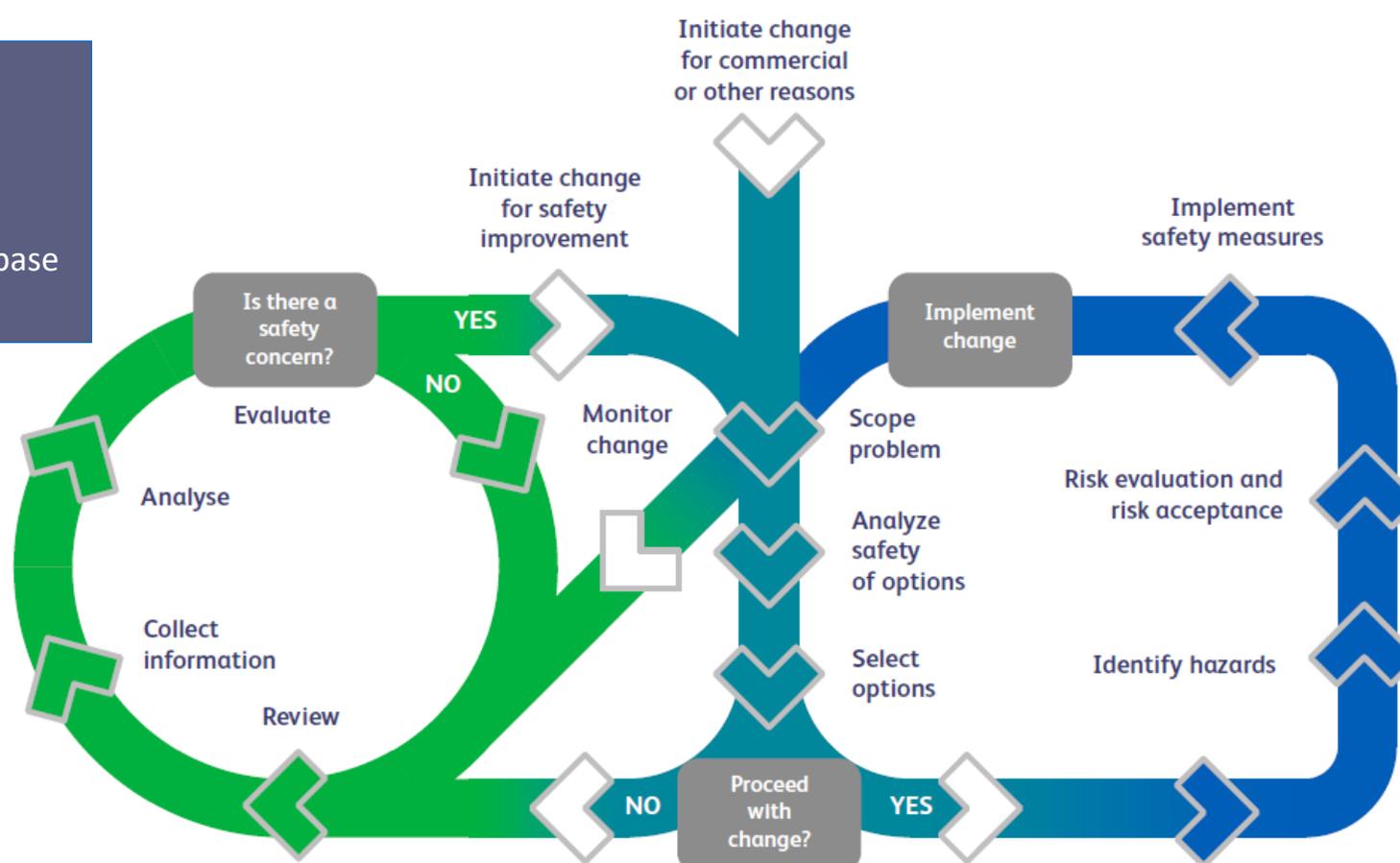
A Better, Safer Railway

Safety Data

- Close Call
- Dashboards
- Data requests
- Industry Shared Risk Database
- SMIS

Analysis & Reporting

- Accident investigation
- AHSR
- Benchmarking data
- Data requests
- Incident Log Summary
- LOEAR
- Opsweb overseas incident summaries
- PIM
- Rail Accident News
- Rail Investigation Summary
- Route Specific Risk Profile
- RPB
- Safety Performance Reports
- SPAD/TPWS report
- Special Topic Reports



Tools

- Accident Consequence Model
- FLAT
- GeoSRM
- Network Modelling Framework
- PARAT
- PTI risk tool
- Rail Risk Portal
- Risk Profile Tool
- Road Driving Risk Resources
- SPAD risk ranking analyser
- Specific risk model development
- SRM
- TSD – Analysis tool (CBA)

Guidance

- CSM for monitoring guidance
- CSM RA guidance
- Duty of Cooperation Guide
- Independent Risk Assessment Review
- Measuring Safety Performance Guidance
- Safety Assurance Guidance
- Safety Management System Guidance
- Taking Safe Decisions
- Taking Safe Decisions worked examples
- VpF

Collaboration activities

- Duty to cooperate
- ERA Reps European Update
- HAZID
- HAZOP
- Industry Risk Assessments
- Legislation update
- Rail Risk Portal
- Risk Management Forum
- Standards change
- Workshop facilitation

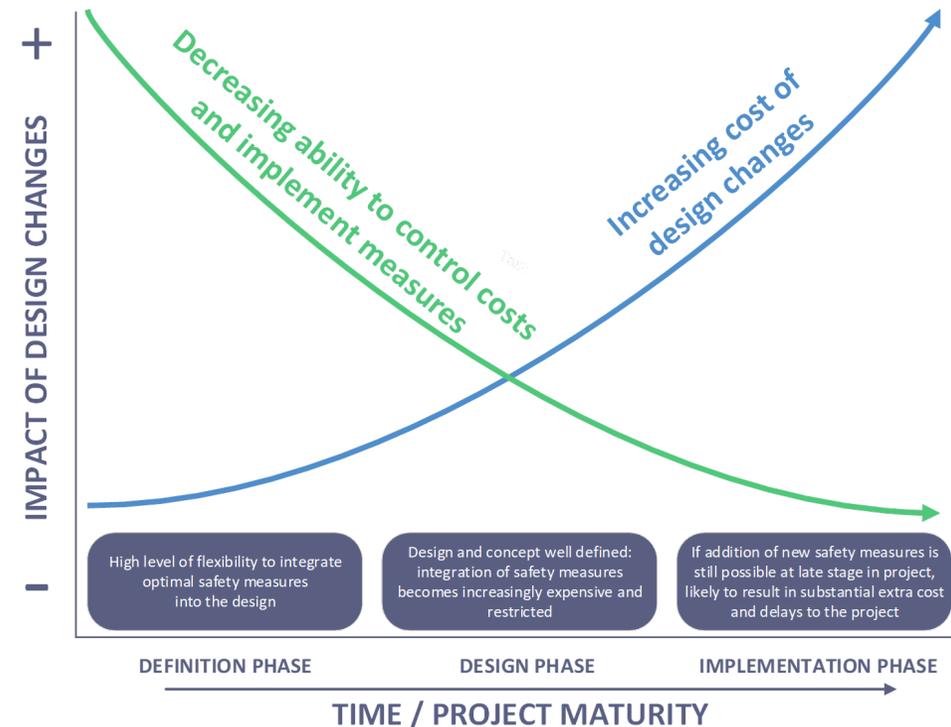
PART 2 - What are your legal responsibilities for safety risk?

Every policy, investment or operational decision taken in the railway industry ***has a potential impact on safety,*** and organisations have ***legal responsibilities for safety.***



PART 3 - When should decisions be taken?

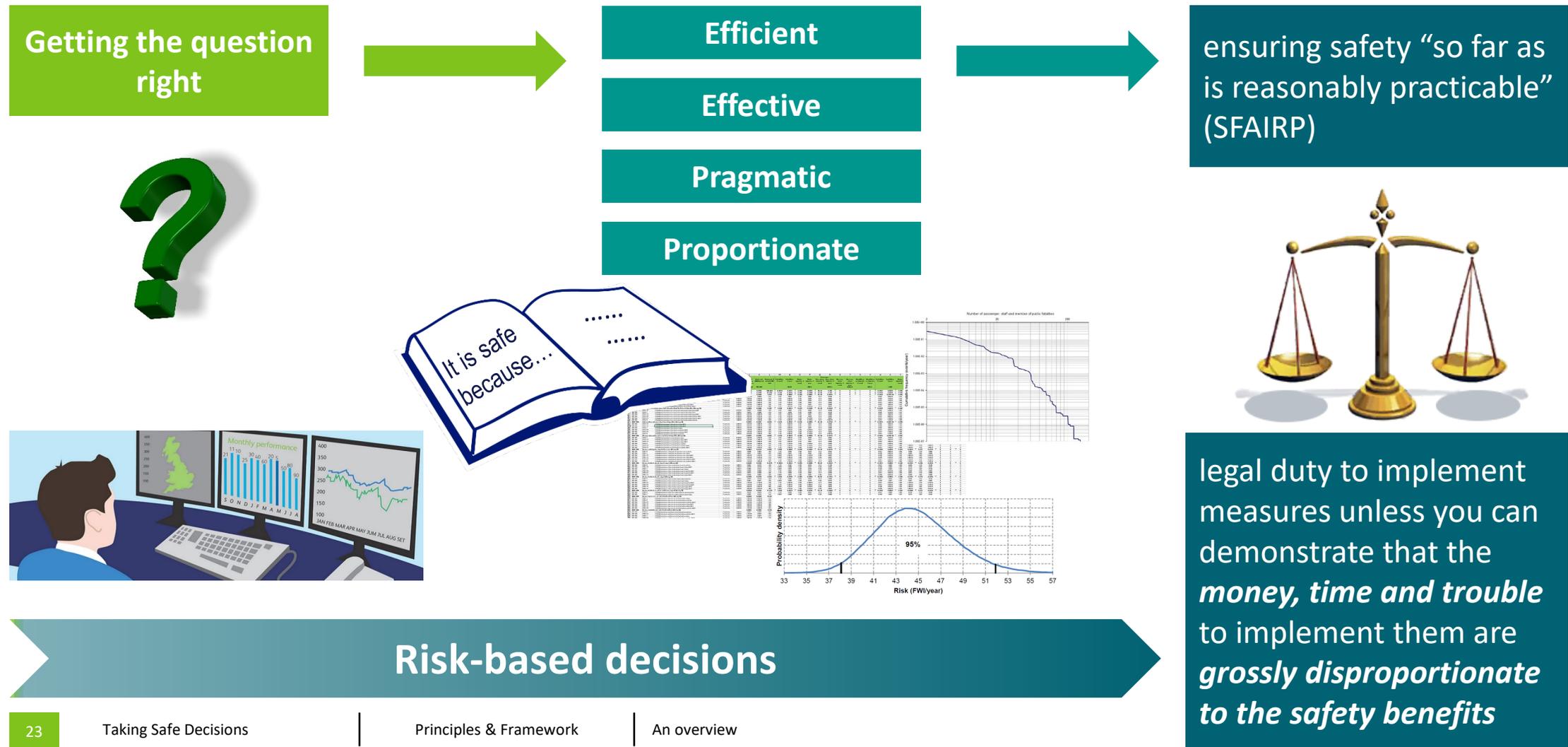
- When do you take decisions?
- When do you plan for safety?
- When do you use risk assessment?
- The benefits of early planning for safety and “safety by design”
- Future-proofing your decisions



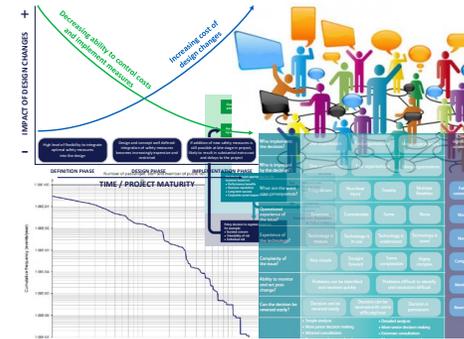
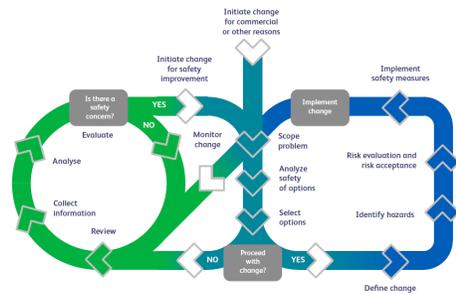
PART 4 - Who should take decisions?



PART 5 - How should decisions be taken?



Taking Safe Decisions 2019 in brief



A framework to guide decision making

How to make rational, equitable, defensible decisions

Aspects of good practice in decision making

How to fulfil your legal duties for ensuring safety

What?

When?

Who?

How?

Taking the right decisions, in the right way, at the right time

The ingredients of good safety management

Legal Framework for effective Safety Management

- Health and Safety at Work etc Act 1974
- Management of Health and Safety at Work Regulations 1999
- ROGS - Railways and Other Guided Transport Systems (Safety) Regulations 2006
- CSM for Monitoring
- CSM for Risk Assessment
- CSM for Safety Management Systems

Industry good practice for effective Safety Management

- RM3 - Risk Management Maturity Model
- Taking Safe Decisions
- Leading Health and Safety on Britain's railway
- Various RSSB and ORR Guidance

Where to go for more help on *Taking Safe Decisions*

To download the main Taking Safe Decisions document and supporting material visit www.rssb.co.uk

Standards and Safety > Improving Safety, Health & Wellbeing > Applying guidance and good practice > Taking Safe Decisions



The screenshot displays the RSSB website interface. At the top, the navigation menu includes 'Standards and Safety', 'Research and Technology', 'Learn and Connect', 'Insights and News', and 'Membership'. A breadcrumb trail shows the path: 'Standards and Safety > Improving Safety, Health & Wellbeing > Applying guidance and good practice > Taking Safe Decisions'. Below the navigation, there are several resource cards for download, including 'Taking Safe Decisions 2019', 'The psychology of judgment and decision making (S130) KNOWLEDGE ANALYSIS', and 'RSSB Guidance Note on CSM RA'. A central diagram titled 'Taking Safe Decisions' shows a circular flowchart with 'Further reading' and 'Case studies' sections. To the right, a large flowchart details the 'Management of change' process, including 'Identify a risk assessment (Part 6)', 'Risk assessment (Part 6)', 'Plan and manage (Part 6)', 'Implement and monitor (Part 6)', and 'Review and improve (Part 6)'. Below the flowchart, a 'Management of change' article snippet is visible, dated 10/05/2019, by Ben Gilmartin, Lead System Safety Engineer. The article discusses the regulatory regime on the GB mainline railway system and the three principle railway-specific regulations governing the management of change.

For more help and for feedback, please contact risk@rssb.co.uk (or ben.gilmartin@rssb.co.uk)

Over to you... Taking Safe Decisions & RM3 in your organisation

1. In terms of making “rational, equitable and defensible” decisions, what do you think your organisation does well or might do better?
2. What parts of the Taking Safe Decisions and RM3 principles and framework are most relevant to your organisation's activities?
3. Who in your organisation needs to be aware of, know, understand, or be an expert in using Taking Safe Decisions?
4. What should you or your organisation do next?

The next presentation is from
ORR
Please wait while we change presenters

ORR protects the interests of rail and road users, improving the safety, value and performance of railways and roads today and in the future



RM³ in ORR

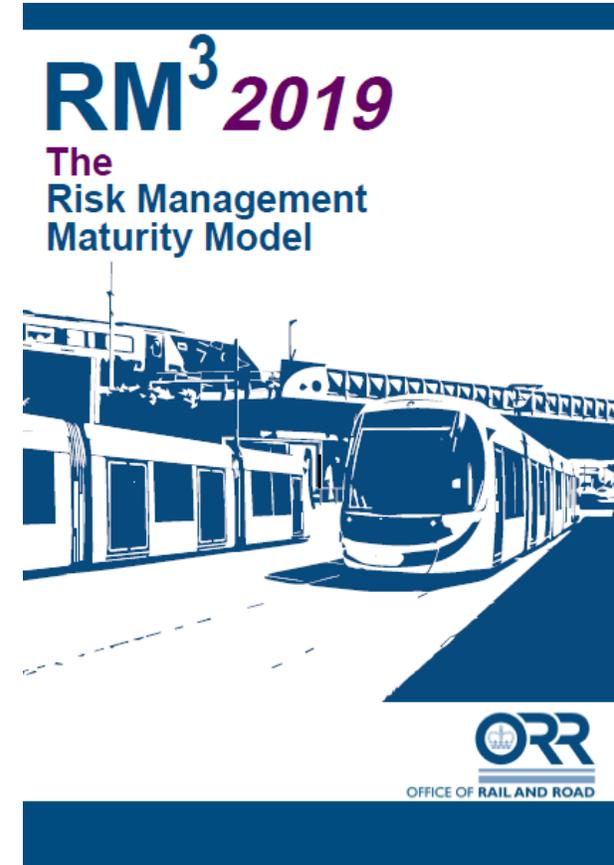
Tom Wake, Head of NR Route Teams

RM³ workshop

December 2019

RM³ – the ORR experience

- How do we use RM³?
- What are the challenges?



The role of RM³ in regulation

- *RM³ is not an audit tool, but a model to structure discussions about evidence and where to go next, either internally in organisations or between inspectors and the organisations we regulate.*
 - We don't do 'RM³ inspections'
 - We systematically collect evidence to inform our view of management maturity
 - We use the RM³ model to structure our thinking and conclusions
 - Our conclusions aim to suggest improvement priorities to achieve greater management maturity

Information sources

- National projects looking at a specific area of risk management across the organisation
- Local inspections of route-specific risk control
- Investigations & complaints
- Local, regional and national liaison

Table of RM3 criteria and assessment levels

RM3 criteria	Summary of Evidence	Section Numbers	Assessed Level
Leadership - SP1	This reporting period Inspectors were pleased to note a number of important safety initiatives were in the process of being developed. Senior managers have taken ownership for their delivery. These include the WMEP, WMCA and the implementation of a new inspection regime for Longitudinal Timbers. Managers appear to have successfully communicated the importance of these initiatives to staff. These initiatives and their success so far indicates that managers at a number of levels within the Route are open to ideas for improvement. Although this work has been encouraged by inspectors, the positive work this year indicates a high '3'.	4.8, 4.9, 10.1, 12.1	3
Safety Policy - SP2	Criterion was not assessed.	-	-

Ways of collecting RM³ information

■ Primarily from inspection findings

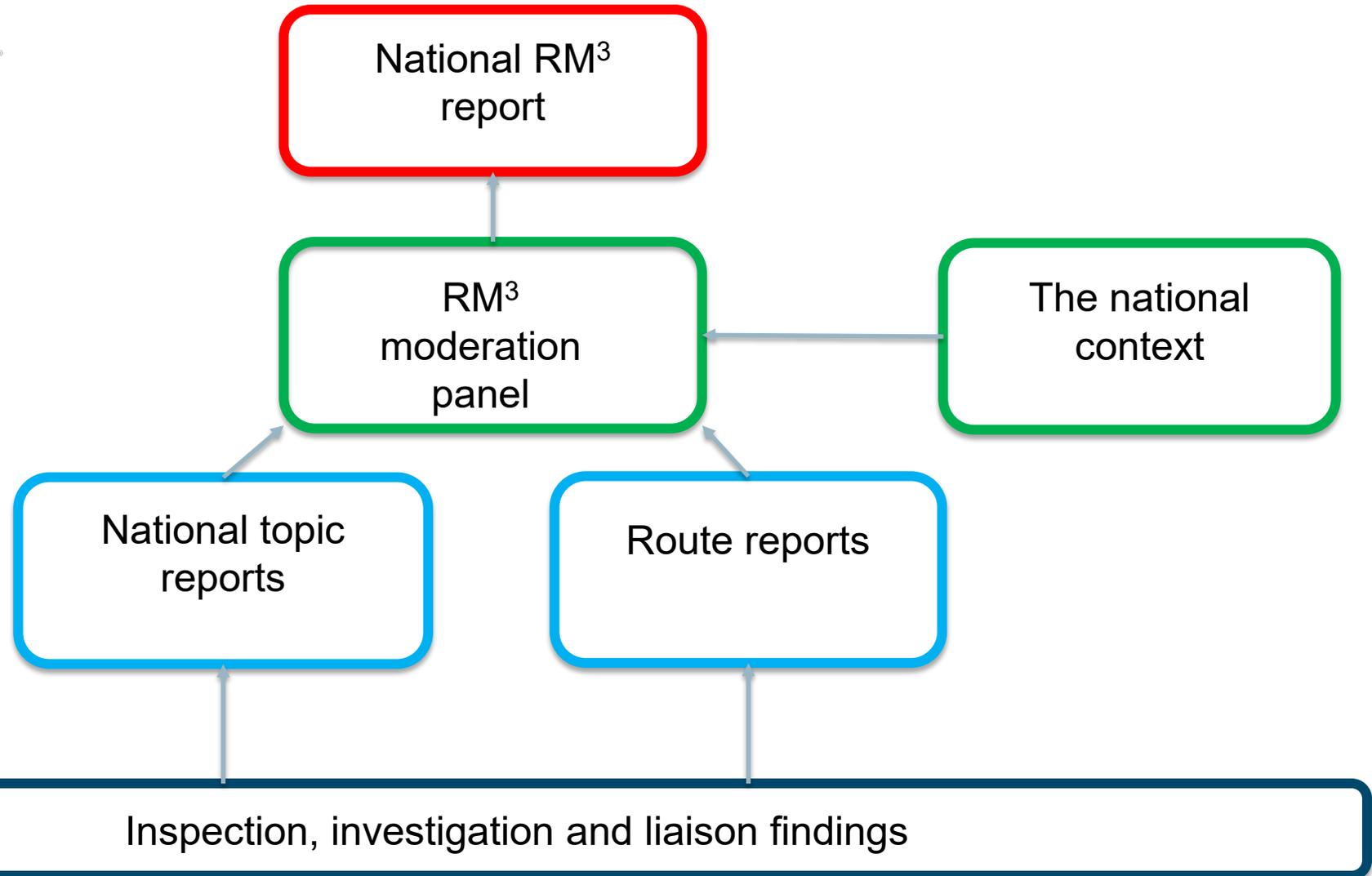
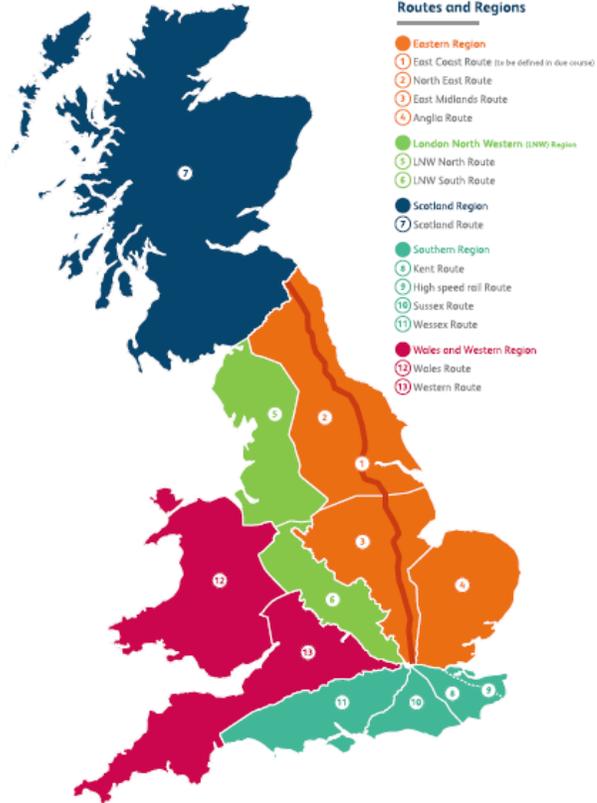
- From the outset, inspection plans list the RM³ elements that need to be reported on
- Inspectors are expected to give their qualitative view of strengths and weaknesses and an assessed level.

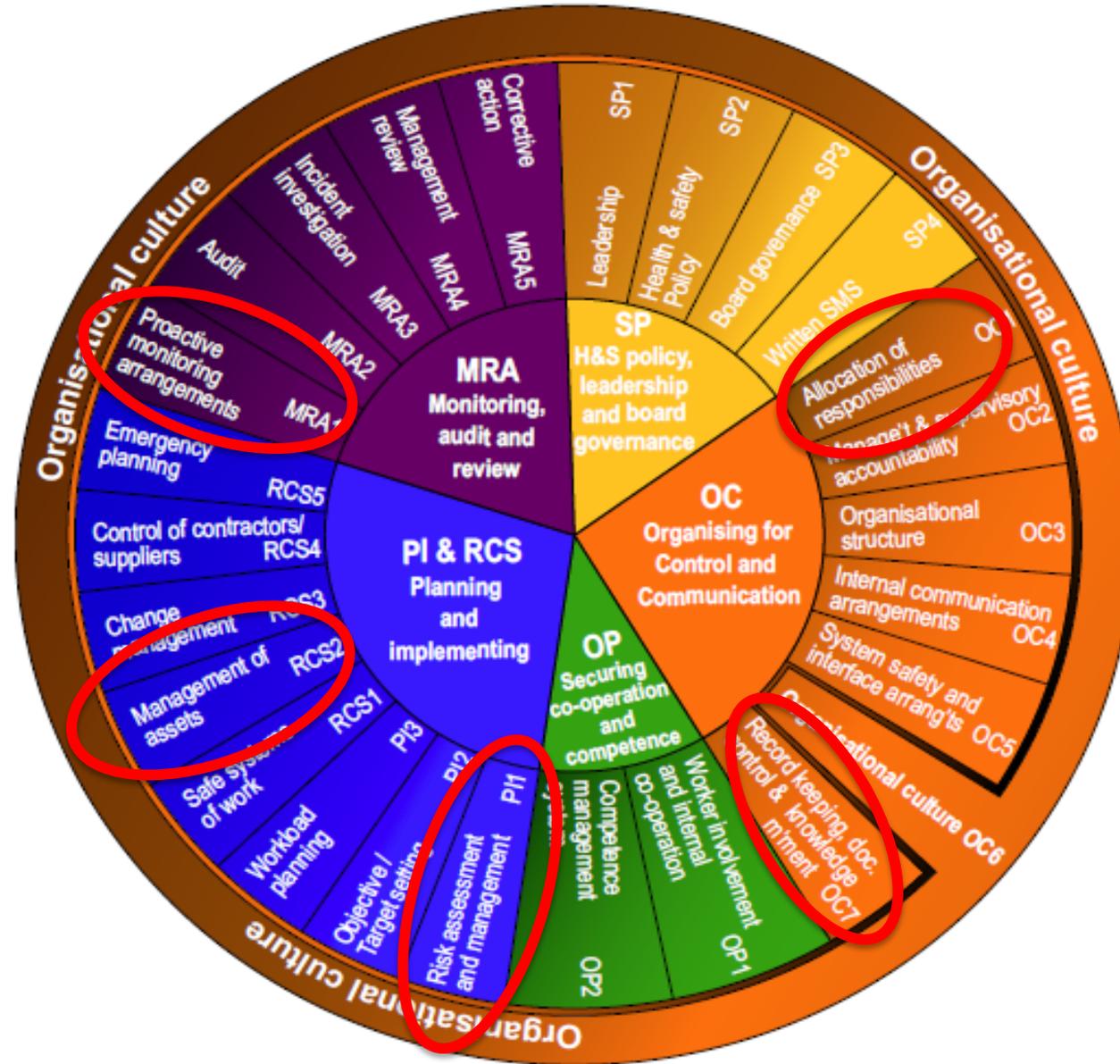
■ Investigation & liaison work findings

- These are the conclusions from our non-inspection work, pulled together by the route team manager usually in discussion with their team.

Aggregating findings

Indicative only, subject to consultation





Route comparisons:

- PI1 risk assessment & management
- RCS2 Asset management
- Proactive monitoring arrangements
- Allocation of responsibilities
- Record-keeping

RM³ moderation panel

■ Applies a sense check to national and route assessments

- Consistency
- Quantity
- Quality
- Currency

■ Applies a broad overview to findings

- Identify and, if necessary, moderate assessed levels

■ Produces a national RM³ report

A composite RM3 assessment of Network Rail risk management maturity in 2018-19



The national report

SP2 Health and Safety Policy

We obtained limited evidence on this topic, insufficient to justify a change in the assessed level from 2017-18. Our overall experience is that where centrally-led programmes do well it is because of clear policies. This has implications for the devolved world planned for CP6. Regions will need to play their part in developing clear policies to achieve sustained and improved risk control.

Assessed Level: Standardised

<p>CENTRAL LIAISON At our regular meetings with STE we monitor and discuss the principal elements of Network Rail's Health and Safety Strategy. We have found evidence of strong direction and assurance in some areas, such as the Home Safe Plan. In others, such as the Near Miss Reduction Plan, we have tried to exert influence to make them better targeted.</p>	3
<p>WESSEX The Home Safe Plan provides the overarching structured approach for the Route to manage health and safety risks. There is clear evidence of awareness of the 'home safe every day' message throughout the areas of the route inspected. It was observed to have an influence on how work activities are planned and implemented (e.g. the flow chart instructions produced for the management of risks to the track during hot weather provided clarity for maintenance staff on how to reduce the likelihood of track buckle, and the potential of a train derailment).</p> <p>Conversely, there was narrative evidence from staff that other pressures on the Route (e.g. managing track quality to enhance train performance) can sometimes place pressures on prioritising the importance of this safety policy.</p>	3

- Network Rail gets the evidence
- We don't emphasise the assessed level
- We provide a commentary
 - These are designed to set the evidence within a national context and generate discussion about improvement
 - This is the real value of RM³

The challenges

■ Consistency

- Dealing with outliers: over or under assessment
- Consistency between years
- Range of assessment – a proxy measure for degree of confidence?

■ Quantity

- Too much or too little evidence

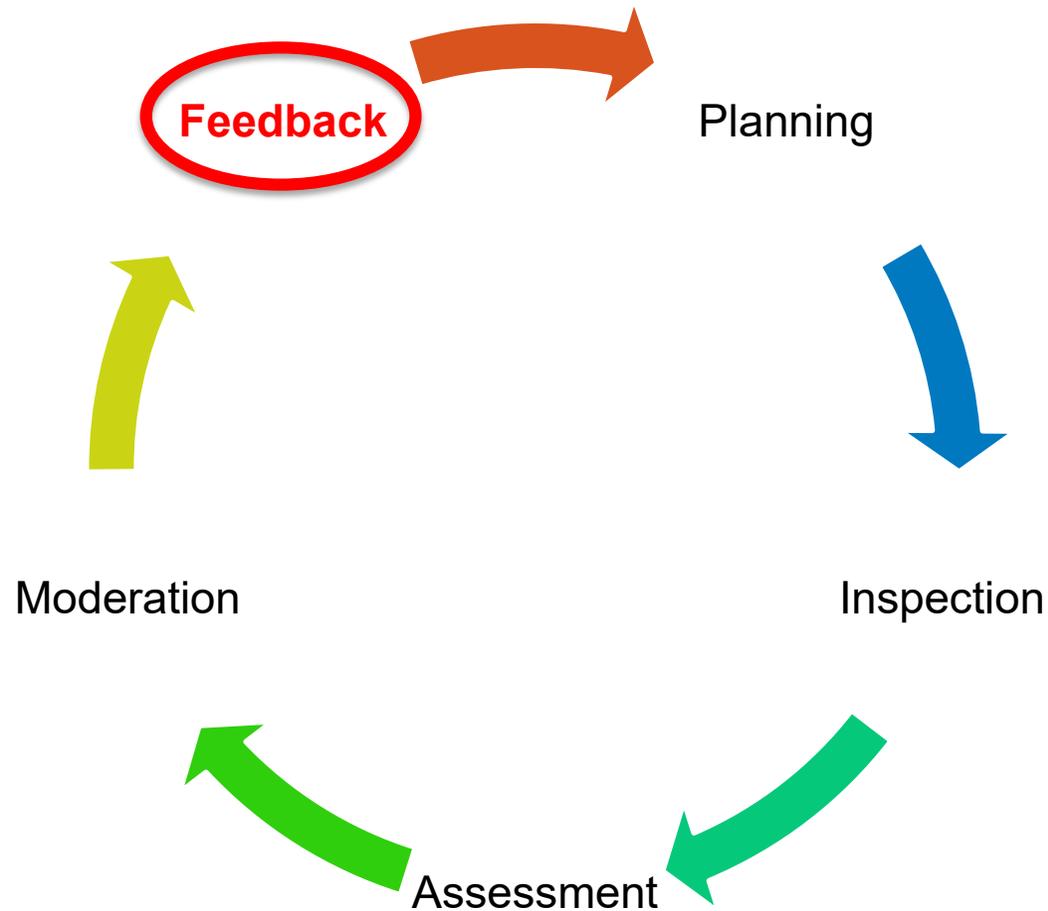
■ Quality

- Evidence that fails to address the criteria, or does so in vague terms

■ Currency

- Some evidence might be 12 months old. How to include when things have changed

How we manage the challenges



- RM³ briefings and workshops
- Moderation panel
- Feedback to inspectors and team managers

**Thank you for your
attention**

Any questions?

Lunch

RM³ Practical Implementation Exercise

RM³ Practical Application Training Exercise

- To help develop and improve your understanding of RM³, we would like you to step into the shoes of an inspector for an afternoon.
- Typical evidence of what ORR inspectors find on visits, has been represented into four individually numbered evidence sources.
- We want you to:

What we want you to do:

Identify and assess RM³ elements and their level of maturity:

- Each table will be a group and name themselves.
- Go through each evidence source individually.
- You have 20 minutes to read and identify relevant RM³ elements (use the evidence factors and culture call outs).
- Assess the RM³ maturity level of elements you find, but also consider Consistency, Quality, Quantity Currency (CQQC).
- Record the elements and their maturity level in your groups.
- Review the findings before moving to next evidence source.

What did you find and decide?

- We will discuss each evidence source individually to share learning and understanding.
- Provide delegates the opportunity to share their experience of RM³ and their thoughts as to the decisions they made.

RM³ Workshop Wash Up and Group Discussion

Opportunity for the audience to ask questions on RM³ to ORR inspectors in the room:

- Training in RM³;
- Issues with using RM³:2019;
- Suggestions for improvement of RM³:2019;
- What more can ORR do to help?

Closing Comments

Thank you to:

- Presenters;
- Hilton for providing their venue;
- ORR Inspectors and;
- To all rail industry delegates for attending and participating.