

# Regulation of Health and Safety by ORR

# Regulation of health and safety by



## **Aim:**

To give an outline of how we regulate rail health and safety and a snapshot of current challenges

## **Objectives:** to appreciate

- How do Railway safety and economic regulation work together
- History - how serious incidents have led to statutory provisions and H&S improvements
- Legal basis for what we do
- ORR's Health and Safety strategy
- Our regulatory approach to H&S & the outputs/outcomes
- Rail Accident Investigation Branch – Recommendation handling process

# Who we are

~300 staff  
across six offices

- Bristol
- Birmingham
- Glasgow
- London (HQ)
- Manchester
- York



Annual budget  
~£35.9m

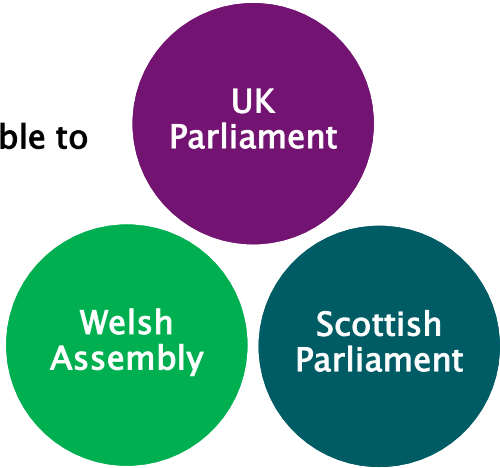
Rail  
£33.2m  
(industry levies)

Road  
£2.7m  
DfT grant

Established by Parliament with powers from various Acts

- Railways Act 1993
- Infrastructure Act 2015
- Railways & Transport Safety Act 2003
- Health & Safety At Work Act etc 1974
- Railways Act 2005
- Statutory instruments

Accountable to



Public law  
(judicial review)



# What we do

# What we don't do

## Railway safety

Inspections

Investigations

Complaints

## Operational oversight

Monitoring NR delivery

Monitoring enhancement projects

Access to track and stations

Authorisation of new fleet & infrastructure

Publication of rail statistics

## Financial & economics

Monitoring financial performance

Support to third party investors

Periodic Review of Network Rail and High Speed 1

## Consumers

Consumer law e.g. ticket sales

Passenger information

Accessibility

Competition cases

Franchising  
(including monitoring train operators' performance)

Fares and ticketing policy

Decisions on enhancements / rail investment

Monitor local highways and roads

Highways England monitor

Road Investment Strategy

Monitoring of performance

Enforcement powers against licence

Safety and economic enforcement powers for rail

Transparency underpins all our work

# Why have ORR?



**1889**

Armagh rail disaster: Runaway carriages collide with following train. 80 killed and 260 injured.

Inspectorate drives legislation quickly through Parliament that mandates continuous brakes, locking of facing points and block signalling.



**1915**

Quintinshill collision, 22 May; 226 killed, 246 injured: Troop train hit local standing train and 2 coal trains; another train hit wreckage caused by mistakes by signalmen. The greatest loss of life in any British train accident. Drives the end of gas lighting in carriages and improves enhanced crash worthiness.



**1952**

Harrow and Wealdstone rail disaster: Train ignored signals, rear-end collision with stationary train, train travelling in the opposite direction ran into wreckage.

112 killed, 340 injured. The greatest peacetime loss of life in a railway accident. Started the long road to automatic train protection.

Drove the control of working hours for safety critical staff.



ing trespassers (suicide 293)

astings to Charing Cross (due to broken fishplate.

continuous welded rails.

**1957**

Lewisham rail crash. Missed signals in fog, rear-end collision with another passenger service. Overbridge fell on wreckage when bridge's abutment struck by derailed locomotive and carriages.

90 killed and 173 injured. Another milestone in making the case for automatic train protection.



This with Hatfield forced Network Rail to bring back in-house maintenance activities

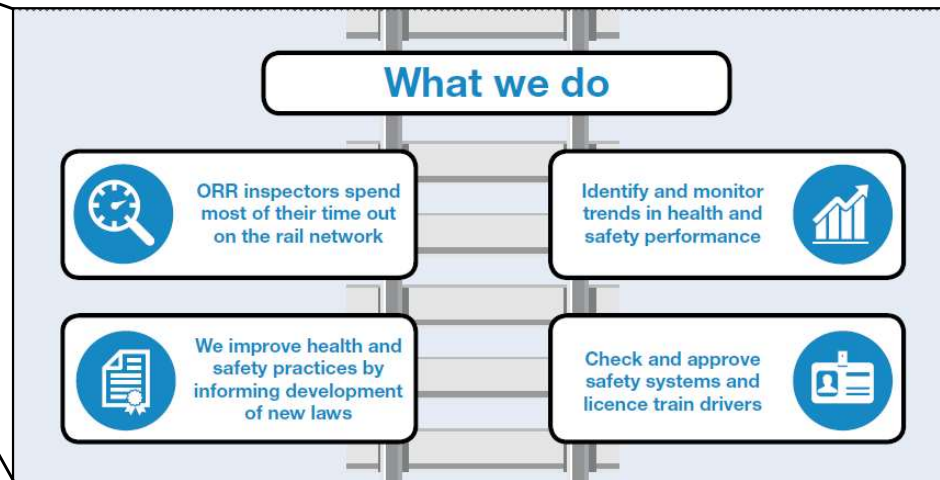
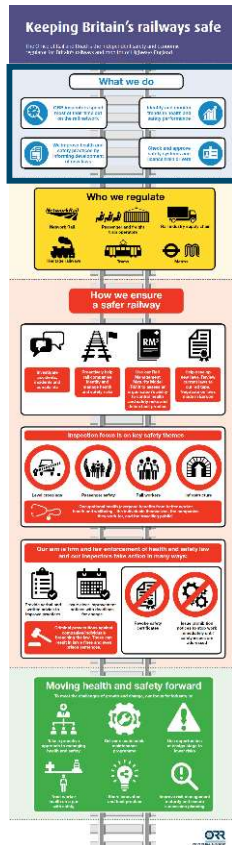


## Our vision and strategic objectives for health and safety

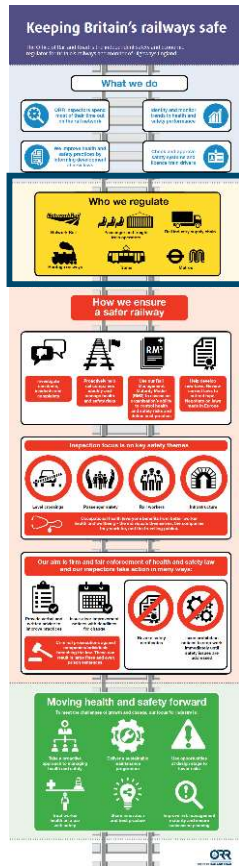
Zero workforce and industry-caused passenger fatalities, with an ever-decreasing overall safety risk.

To enforce the law & ensure that the industry delivers continuous improvement in the health & safety of passengers, the workforce & public. To do this by achieving excellence in health & safety culture, management & risk control.

# What we do

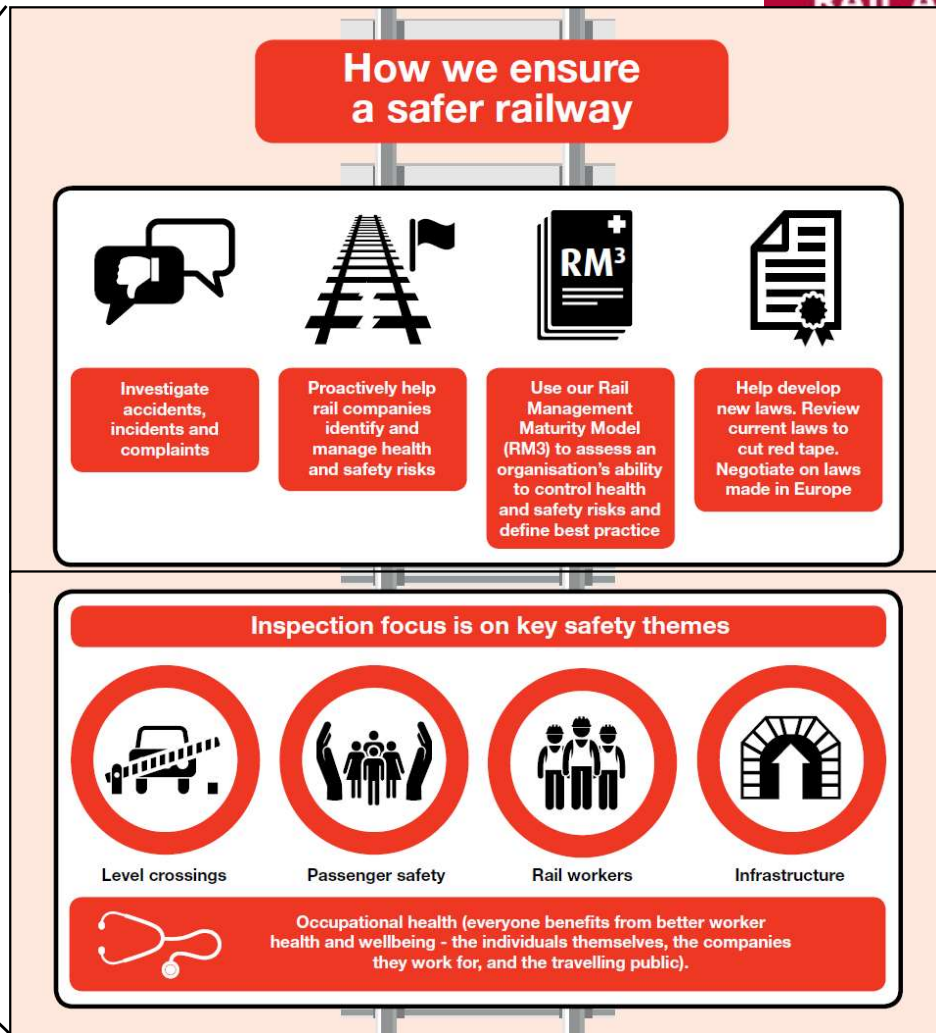
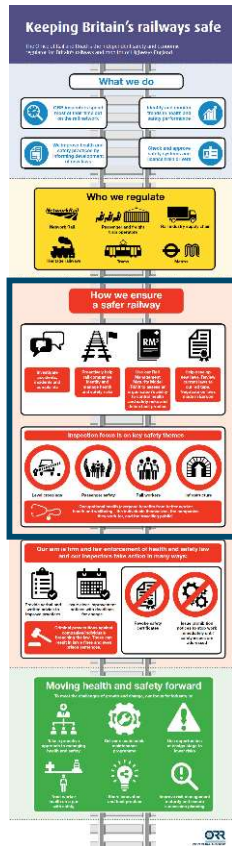


# Who we regulate

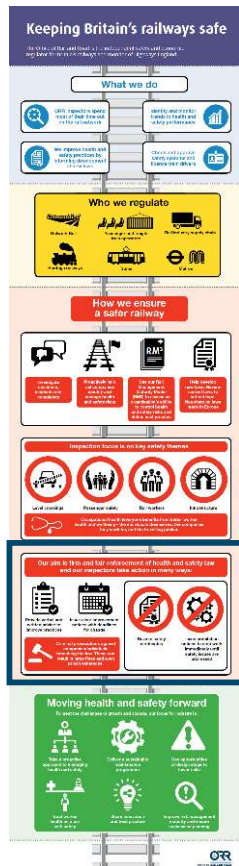




# How we do it



# How we enforce



**Our aim is firm and fair enforcement of health and safety law and our inspectors take action in many ways:**

- Provide verbal and written advice to improve practices
- Issue clear improvement notices with deadlines for change
- Criminal prosecutions against companies/individuals breaching the law. These can result in large fines and even prison sentences.
- Revoke safety certificates
- Issue prohibition notices to stop work immediately until safety issues are addressed

# Safety Legislation

Health & Safety at Work etc Act 1974

Management of Health & Safety at Work Regulations 2003

Railway specific legislation

- Railway and Other Guided Transport Systems (Safety) Regulations 2011 (amended)
- Railway Safety (Miscellaneous) Regulations 1997
- Railway Safety Regulations 1999
- Train Driving Licenses and Certificates Regulations 2010
- European Common Safety Methods
  - Risk Evaluation and Assessment – for managing significant change risk
  - Monitoring – what the dutyholder has to do
  - Supervision – what ORR has to do
- Interoperability Regulations – initial integrity

# Railways and Other Guided Transport Systems (Safety) Regulations, 2006



- Provides the regulatory regime for rail safety, including the mainline railway, metros (including London Underground), tramways, light rail and heritage railways
- The regulations require most railway operators to maintain a safety management system (SMS) and hold a safety certificate or authorisation indicating the SMS has been accepted by the Office of Rail and Road
- Also contains provisions relating to safety critical work and certification of freight wagon entities in charge of maintenance

# Oversight of safety management system



ORR checks the *capability* of a company to deliver a safe railway via the assessment of the Certificate and Authorisation assessment process every 5 years against a published set of criteria

The railway company's *ability* to deliver a safe railway is checked by supervision which is:

- Risk-based
- Strategy led
- Planned over the 5 years of the certificate
- Aimed at improvement
- Uses the benchmark of RM3
- Informs the next round of Certification/Authorisation

# Railways and Other Guided Transport Systems (Safety) Regulations, 2006



## Infrastructure Managers

- Must hold a safety authorisation

## Railway Undertakings (Mainline)

- Part A Safety Certificate: General SMS
- Part B Safety Certificate: How the dutyholder complies with national rules

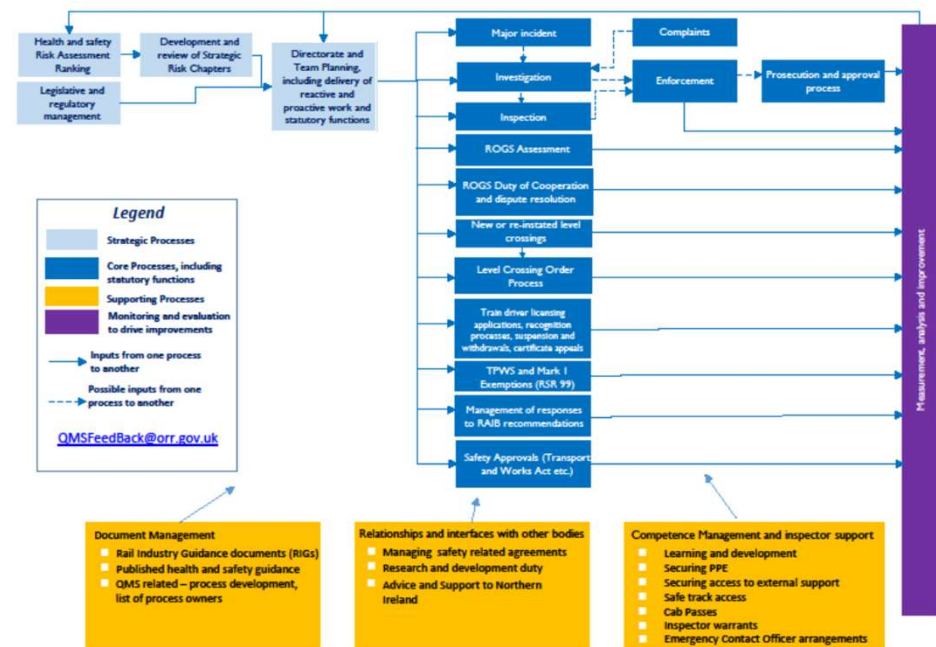
## Non mainline certificates – e.g. London Underground

Safety Certificates and Authorisations are issued for a maximum period of 5 years

# How we are organised

- Railway Safety Division is 110 People
- Mainline teams (5 Regional NR teams, 2 TOC Teams 1 FOC Team),
- Non-mainline (CTSA, trams and heritage)
- Specialist inspectors and Policy and Strategy
- RSD Training Strategy and L&D team
- Knowledge hub
- Assurance of statutory processes

## Quality Management System



# We deliver our strategy by



Ensuring that everyone associated with the railway industry has a mature health and safety Management system in place through:

- Safety Certification and Authorisation – a permissioning regime that tests whether you have a system that is “capable” of delivering a safe railway (renewed every 5 years)
- Not all “railways” require Certificates or Authorisations e.g. Heritage and Trams
- Inspection and Investigation to test whether that is being delivered
- Enforcement if required

Whilst we have “powers” to make duty holders do things the vast majority of time we do it by influencing



# What do we do?



Inspecting and assessing duty holders' compliance with health and safety law

conducting investigations of significant incidents

using our enforcement powers, where appropriate, to drive improvement in risk management

emphasising the importance of measuring and continuously improving safety culture as part of the overall business culture in an organisation

# Risk Management Maturity Model RM3



# RM3 Background



Safety regulatory framework based on the Safety Management System

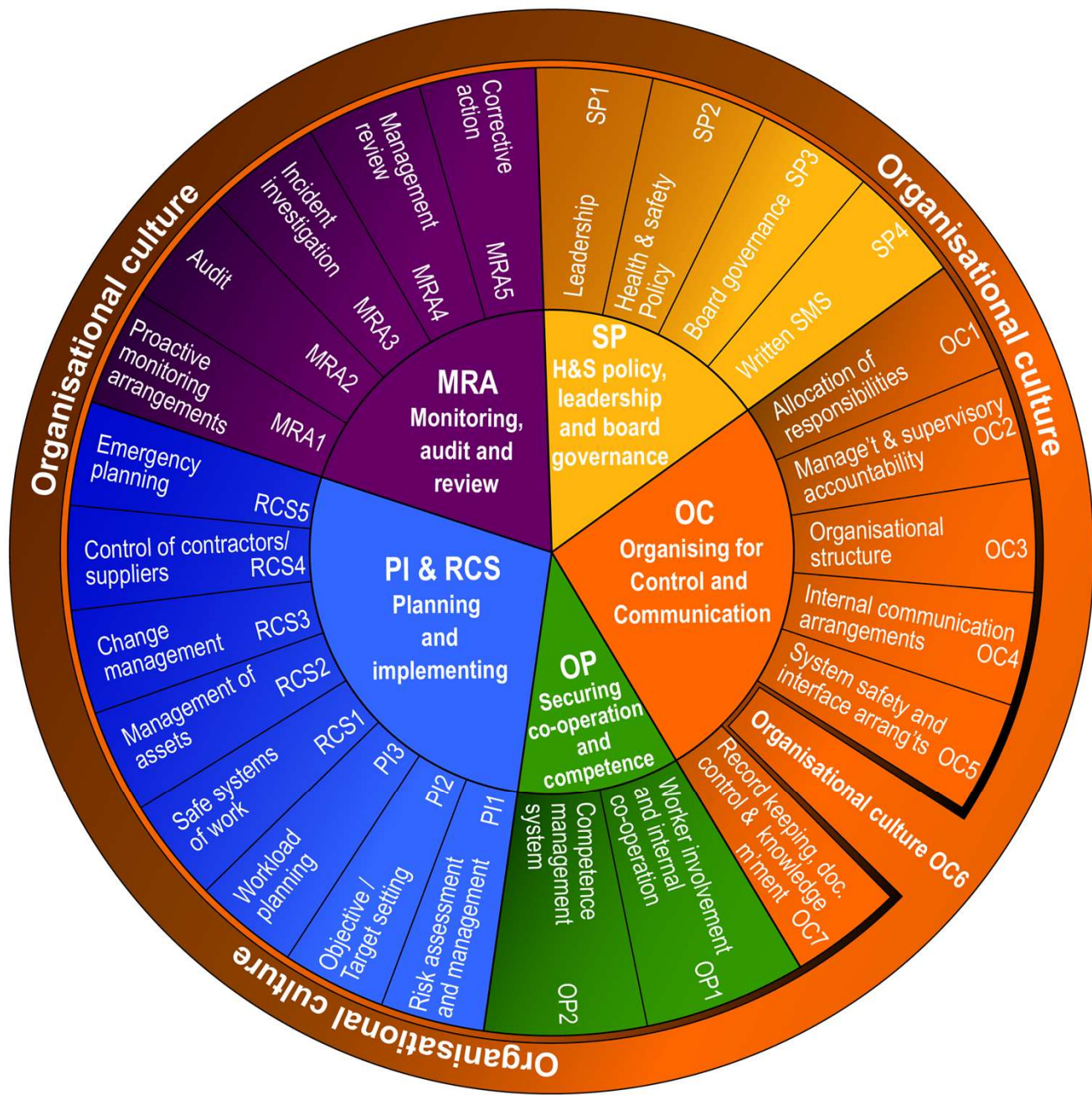
ORR's Risk Management Maturity Model, criteria around 26 plan, do, check, act elements:

1. Ad hoc
2. Managed
3. Standardised
4. Predictable
5. Excellence

First published 2011, reissued 2019

- More examples at each level
- Builds more coherently through the levels
- Brings out observable indicators of positive culture, for each element, at each level
- We have produced a simpler version for Heritage RM3–Heritage

Wide interest across sectors and internationally



# How do we use RM3 to regulate?



Our functions and powers provide a minimum compliance threshold

*to do all that is reasonably practicable to manage safety risks*

Not easily applied to enablers like collaboration, change management, safety learning etc....

BUT SMS criteria provide legal obligation to ensure continuous improvement *of the SMS...*

An obligation to improve management maturity

*“you can have a positive safety culture without a management system, but you cannot have an excellent management system without positive cultures around safety.”*

Continuous improvement

Leadership, setting clear expectations, benchmarking, education and guidance

Compliance with minimum thresholds

enforcement of breaches of the law

Excellence

Predictable

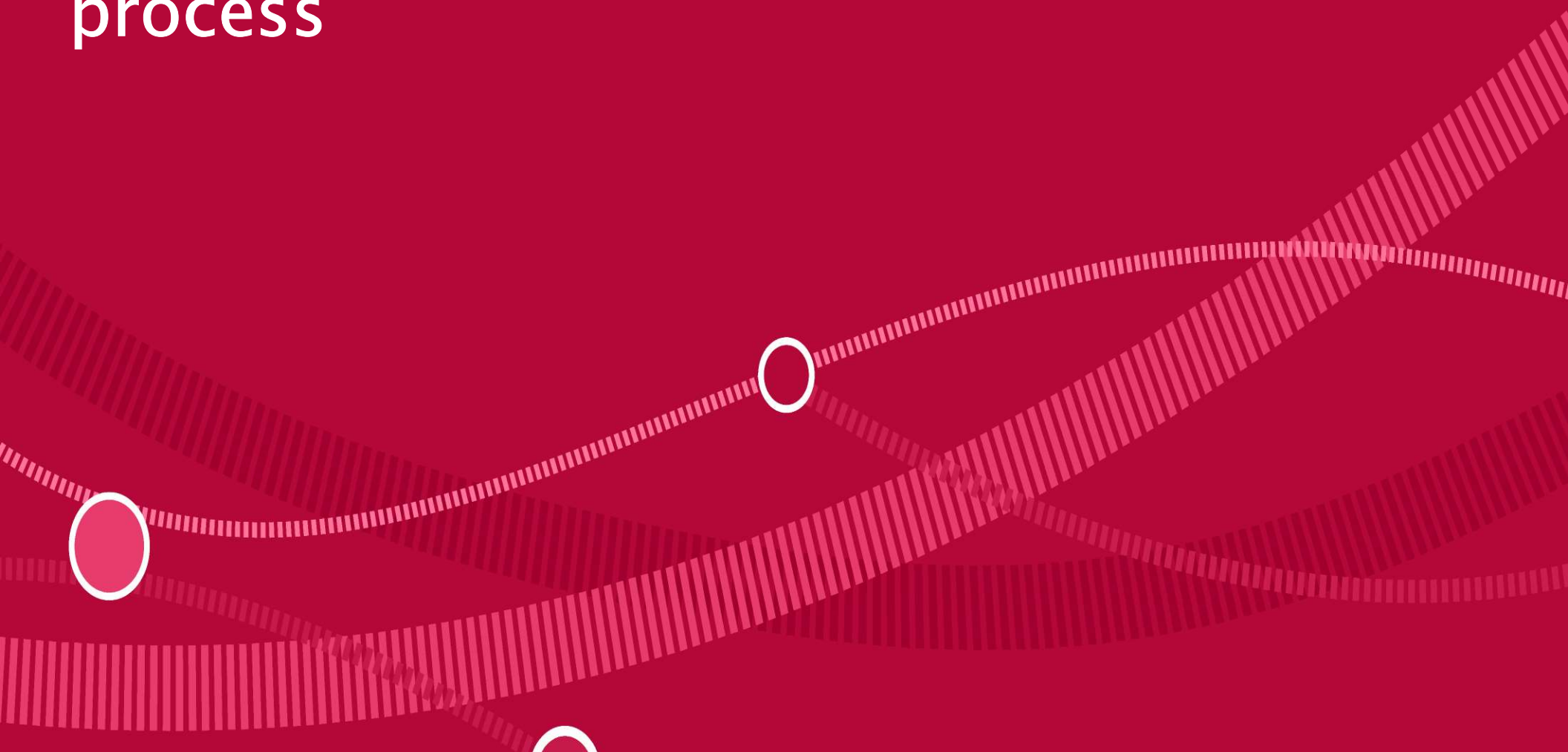
Standardised

Managed

Ad hoc

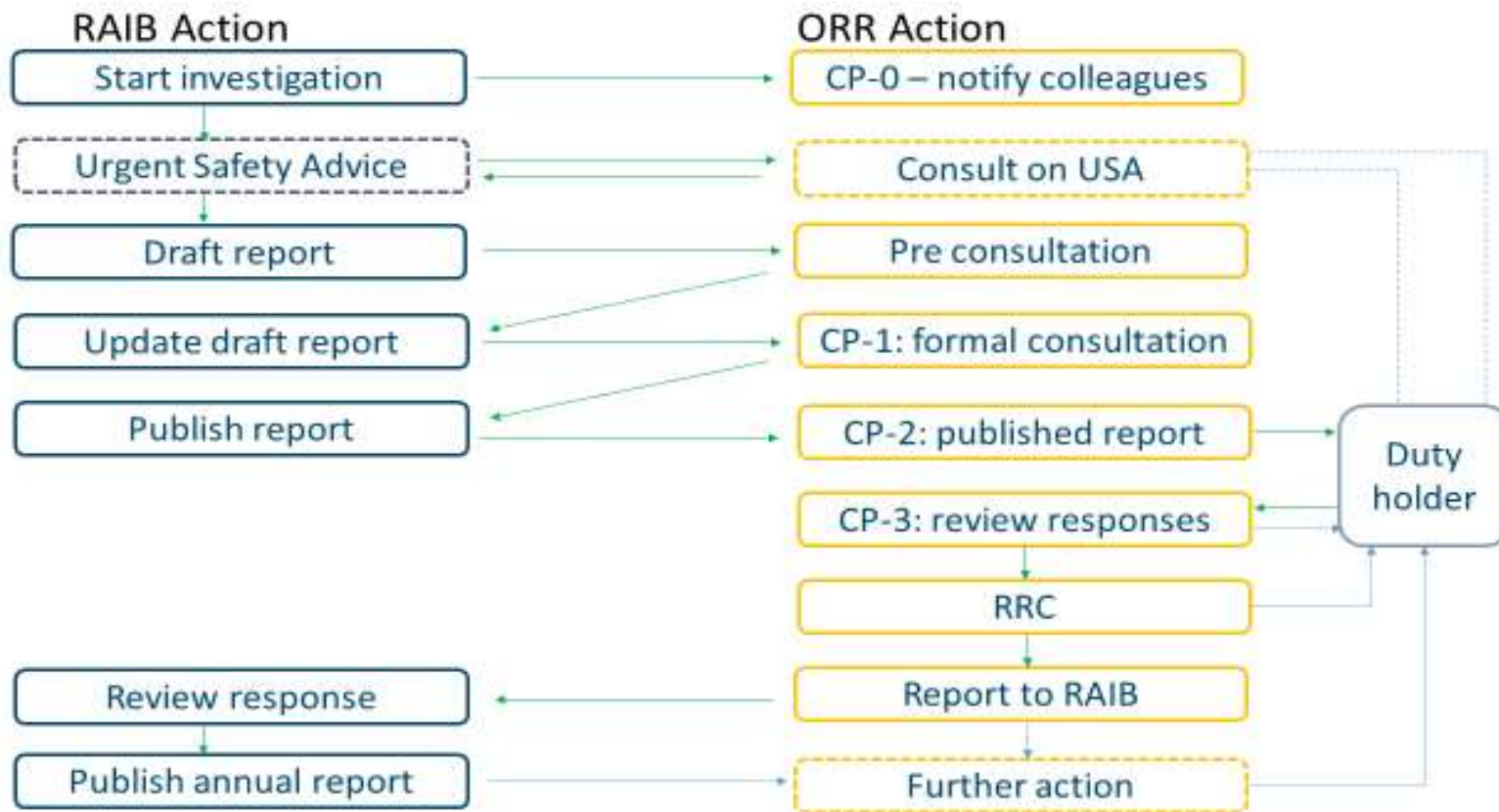


# ORR RAIB recommendation handling process





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# Contact with ORR



- When a RAIB report is published ORR will review it and decide who should act upon the recommendations
- ORR will then formally write to those organisations we think should act upon the recommendations
- The letter will include details of an ORR lead inspector. They should be your point of contact for 'how' you plan to address a recommendation
- Formal responses should be sent to [rec.handling@orr.gov.uk](mailto:rec.handling@orr.gov.uk)
- A response to a recommendation should set out:
  - What has been done to address it
  - What is planned to address it (ideally with timescales)
  - If you decide not to act upon a recommendation (or part of it), the justification for doing so
- ORR will then review that response and pass it to RAIB with a status (see next slide)
- ORR will report to RAIB within 1 year of a report being published. A duty holder will be asked for further updates, which ORR will report to RAIB, until the status is either implemented,

# Recommendation statuses



- Progressing** – end implementer has a plan to address the recommendation, but without a clear completion date
- Implementation on-going** – end implementer has a time-bound plan to address the recommendation
- Insufficient response** – end implementer has not responded or has provided a plan that will not deliver the requirements of the recommendation
- Implemented by alternative means** – end implementer has taken action to address a recommendation, but not in the way envisioned by RAIB
- Implemented** – end implementer plan to address recommendation has been completed

# Questions....