

# Enforcement decision making on the UK railway

## Enforcement Management Model and its practical application

Paul Appleton

*Deputy Director, Railway Safety  
HM Deputy Chief Inspector of Railways*

# Office of Rail and Road

Our railway health, safety, economic and road functions overall are driven by UK and EU legislation and on the basis that we are also accountable to laws passed by the Scottish government.

As a regulator we are accountable to Parliaments and the public to:

- Protect the people who work on, use, or interact with the railway. This is both to ensure continuous improvement in health and safety and, on the economic side, to temper the monopoly power of Network Rail.
- Ensure fair access to a rail network and other infrastructure which are becoming increasingly congested.
- Ensure Highways England carries out its investment programme on England's strategic road network effectively. It is our job to report on Highways England's progress in delivering this investment, on budget and to time.
- Protect the interests of future users by working with the industry and with funders as they develop the network of tomorrow.

# What am I going to cover

- Enforcement Policy Statement
- Enforcement Management Model
- Practical application of the EMM to enforcement

# What am I not going to cover

- Selection of incidents for investigation
- Investigation – Planning, reasonable lines of enquiry, evidence collection, witness management, monitoring, etc. etc.
- Approval of cases for prosecution – evidential test and the public interest test
- Conduct of cases in court

# Who enforces health and safety legislation on GB's railways

- 80 warranted Inspectors and Inspector Assistants enforce health and safety legislation
- We cover all mainline railways, light railways (e.g. London Underground), metros, tourist railways (steam trains), Trams, etc.
- Enforce health and safety for both travelling public and workforce
- The power to take enforcement is the Inspector's not ORR, it is their name on the documentation
  - Competence and management controls around inspectors

# Heath and Safety enforcement

Health and Safety legislation is Criminal law

Inspectors can:

- Give guidance verbally, emails & letters, this is 99% of what we do
- Issue Improvement Notices (20 in 19/20, and 18 in 18/19)
- Issue Immediate or Deferred Prohibition Notices (4 in 19/20, and 3 in 18/19)
- Prosecution – unlimited fines and or up to 2 years in prison (3 in 19/20 and 4 in 18/19)
  - Renown Consultants Ltd case was our first relating to fatigue

# Prosecutions concluded in 19/20

Defendant	Incident	Fine
Govia Thameslink Railway Ltd	On 07/08/2016 a passenger aboard the Gatwick Express train suffered a serious head injury which tragically led to his death. The passenger's head came to be outside of a coss-side droplight window on the train, where it was struck by a signal gantry. The risk created by droplight windows had not been assessed by GTR and the control measures in place were inadequate.	£1 Million
DB Cargo (UK) Ltd	Between 01/06/2015 and 02/06/2017 DB Cargo failed to manage the risk of trespass at their Bescot Yard site. This failure resulted in an incident in June 2017 where three children entered Bescot Yard Freight Terminal through a pre-existing hole in a fence and received electric shocks from 25,000 volt overhead line equipment.	£1.2 Million
Renown Consultants Ltd	On 19/06/2013 two men died in a road traffic accident after completing a night shift working on the railway. Renown was routinely failing to follow its own fatigue management procedures or comply with working time limits for safety critical work and had not conducted a suitable and sufficient risk assessment of the driver's fatigue.	£450,000 + £350,000 costs

# ORR Health and Safety Compliance and Enforcement Policy Statement (EPS)

Strategic objective to drive for a safer railway:

- *“enforce the law and ensure that the industry delivers continuous improvement in the health and safety of passengers, the workforce and public, by achieving excellence in health and safety culture, management and risk control”*

Key principle:

- *“we believe in firm but fair enforcement of legislation”*

Law sets out regulatory principles:

- Regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent
- Regulatory activities should be targeted only at cases in which action is needed

# EPS – key principles

Enforcement will be **proportionate** to the level of harm or risk of harm

**Targeting** enforcement on those whose activities give rise to the most serious risks, where the hazards are least well controlled

**Consistency** means taking a similar approach in similar circumstances to achieve similar ends

**Transparency** help duty holders to understand what is expected of them and what they should expect from ORR

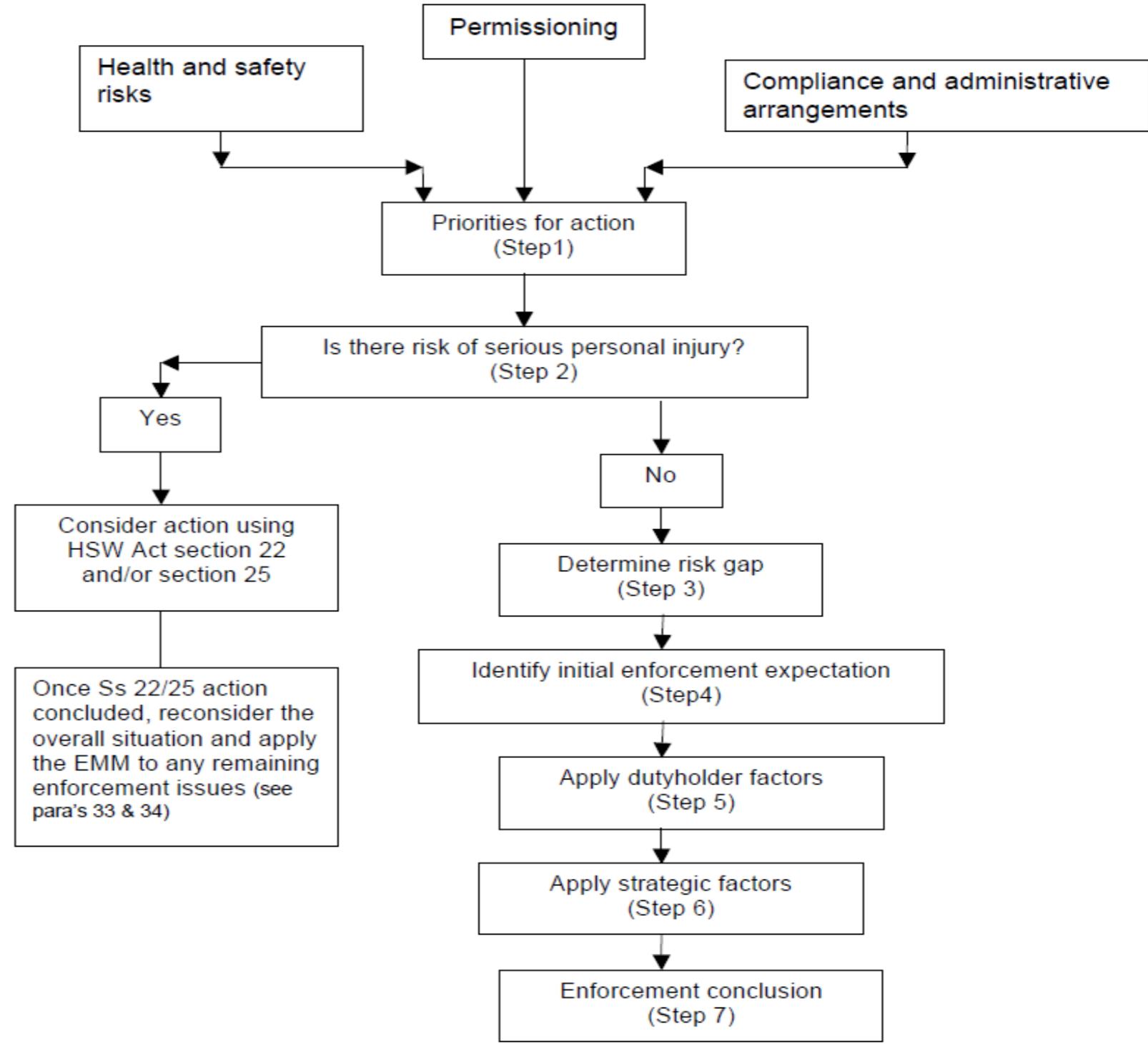
ORR is **accountable** to the public for its actions and has mechanisms for responding to complaints

# Enforcement Management Model

- Designed to help inspectors exercise judgement when making enforcement decisions in line with Enforcement Policy Statement
- A fundamental principle is that enforcement action should be **proportional** to the health and safety risks and the seriousness of the breach of law
- EMM helps managers monitor the **fairness** and **consistency** of inspectors' enforcement decisions
- Helps less experienced inspectors in making decisions
- Assist others (e.g. those directly affected) to understand the principles that inspectors follow when deciding on a particular course of action
- The EMM is published by Health and Safety Executive

<http://www.hse.gov.uk/enforce/emm.pdf>

# Enforcement Management Model: how does it work?



# 1<sup>st</sup> Steps of the Enforcement Management Model

- Step 1 – priority for action – what is the issue?
- Step 2 – is there a risk of serious personal injury?
  - If there is then take immediate action and then back to EMM to decide on further enforcement
- Step 3 – determine risk gap based on consequence and likelihood
  - **Risk Gap** is the difference between **actual risk** and **benchmark risk**

# Risk Gap Analysis

The difference between the Actual risk and Benchmark risk

**Actual risk** is determined by inspection or investigation & is made up of:

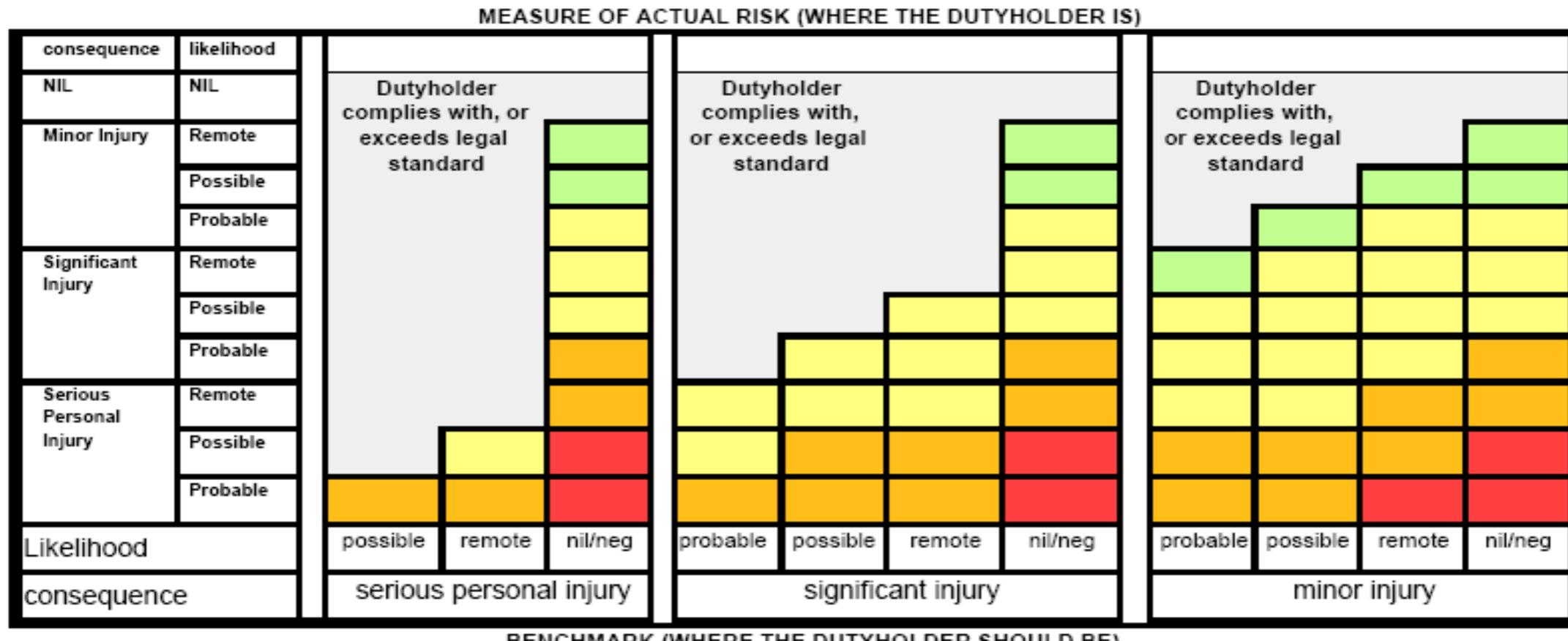
- Consequence – the nature of the harm that could /or has occurred
- Likelihood – how likely is the event happening
- Extent – how many people could it affect

**Benchmark risk**

- Standards / Guidance describing how the risk should be controlled

# Risk Gap

**RISK GAP TABLE 2.1**  
Single and low casualties



# Standards

TABLE 3 - Standards

Descriptor	Definition
What is the authority of the appropriate standard?	
Defined standard	Minimum standard specified by Acts, Regulations, Orders and ACoPs. For example, defined standards of edge protection, requirement to fit safe load indicators to cranes, prohibitions of certain work activities, requirement to have a licence for certain asbestos work, licence conditions.
Established Standard	Codes of Practice and other standards linked to legislation, eg CEN standards, providing specific standards of health, safety and welfare. Also published or commonly known standards of performance interpreted by Sectors, TD, SG or other specialists, industry or other organisations as levels of performance needed to meet a general or qualified duty under health and safety law.
Interpretative Standard	Standards put forward by Sectors, TD and SG or other HSE specialists, which are not published or available generally, but are examples of the performance needed to meet a general or qualified duty. Also standards interpreted by inspectors from first principles.

# EMM – Initial Enforcement Expectation

Take the risk gap and the authority of the relevant standard to determine the Initial Enforcement Expectation

How far is duty holder from the relevant industry standard

- Defined – specified by Acts, Regulations, ACoPs
- Established – other codes of practice or standards linked to legislation e.g. CEN standards or other commonly known standards of performance
- Interpretative – examples put forward by ORR to meet a general or qualified duty, also working from first principles

# Initial Enforcement Expectation

Table 5.1 Health and safety initial enforcement expectation			
Risk Gap	Standards	Initial Enforcement Expectation* (to secure compliance with the law)	Prosecution
Extreme	Defined	Improvement Notice	Yes
	Established	Improvement Notice	Yes
	Interpretative	Improvement Notice	
Substantial	Defined	Improvement Notice	
	Established	Improvement Notice	
	Interpretative	Letter/inspection form	
Moderate	Defined	Improvement Notice	
	Established	Letter/inspection form	
	Interpretative	Letter/inspection form	
Nominal	Defined	Letter/inspection form	
	Established	Letter/inspection form/Verbal warning	
	Interpretative	Verbal warning	

\*Immediate risk of serious personal injury has already been considered and dealt with where appropriate

# Dutyholder Factors

- Previous enforcement (written/verbal)
- Incident history
- Economic advantage
- Level of actual harm
- Standard of general conditions
- Inspection history
- Attitude!

# Strategic Factors

- Public interest
- Vulnerable groups protected
- Long term impact of action
- Effect on dutyholder
- Effect on compliance with benchmark
- Impact of action
- Enforcement Policy met

# Enforcement conclusion

To ensure action is targeted and appropriate

- Does the enforcement action deal with the most serious risks in order of priority, and in an appropriate timescale?
- Has the cause of the risk been addressed?
- Have immediate failures to control risk or comply with the law been dealt with?
- Are the underlying problems addressed?
- Is it likely to secure sustained compliance?
- Evidence can be obtained to support the action
- Principles and expectations of EPS have been met

# Practical application of EMM to formal enforcement

## Track worker safety Improvement Notice

- GB has had a number of Track Worker fatal accidents/near misses
- The infrastructure manager (Network Rail) had tried several times to change worker behaviours without success
- We carried out a series inspections across the country looking at track worker safety in order to gather evidence to support enforcement
- We found that Network Rail relied too heavily on unassisted lookout protection
- Our conclusion was that should have been using risk controls further up the risk control hierarchy e.g. when trains are not running, or technological means of protection

## Section 1

Duty holder Mosaic case no

Company name

Network Rail Infrastructure Ltd

Brief description of circumstances and summary of the risks to be considered here

Inspection findings from 2018-19 demonstrate that NR's arrangements for ensuring the safety of persons on or near the track from moving trains rely too heavily on unassisted lookout protection, without adequate consideration of risk controls further up the risk control hierarchy, such as doing work when trains are not running, or using technological means of warning or protection. Our findings also showed inconsistent improvement plans across the routes, with wide variation in scope and ambition.

## Section 2

Risk of serious personal injury – HSWA Section 22 Prohibition Notice

Yes  No Article / substance is cause of imminent danger of serious personal injury – HSWA  
Section 25 powersYes  No 

## Section 3 – Risk gap (From Table 1 and Figures 2.1 or 2.2)

Actual risk	Consequence		Serious <input checked="" type="checkbox"/>	Significant <input type="checkbox"/>	Minor <input type="checkbox"/>
	Likelihood	Probable <input checked="" type="checkbox"/>	Possible <input type="checkbox"/>	Remote <input type="checkbox"/>	Nil / negligible <input type="checkbox"/>
Benchmark	Consequence		Serious <input checked="" type="checkbox"/>	Significant <input type="checkbox"/>	Minor <input type="checkbox"/>
	Likelihood	Probable <input type="checkbox"/>	Possible <input type="checkbox"/>	Remote <input type="checkbox"/>	Nil / negligible <input checked="" type="checkbox"/>
Risk gap (and table used)	Table 2.1	Extreme <input type="checkbox"/>	Substantial <input type="checkbox"/>	Moderate <input type="checkbox"/>	Nominal <input type="checkbox"/>
	Table 2.2	Extreme <input checked="" type="checkbox"/>	Substantial <input type="checkbox"/>	Moderate <input type="checkbox"/>	Nominal <input type="checkbox"/>
<b>No breach of law OR no risk gap <input type="checkbox"/></b>					

## Section 4 – Initial Enforcement Expectation (Tables 5.1, 5.2 or 5.3)

Benchmark standard (Table 3)		Defined <input checked="" type="checkbox"/>	Established <input type="checkbox"/>	Interpretative <input type="checkbox"/>
Compliance / admin descriptor (Table 4)		Absent <input type="checkbox"/>	Inadequate <input type="checkbox"/>	Minor <input type="checkbox"/>
Compliance with permissioning document		Contravention <input type="checkbox"/>	Irregularities <input type="checkbox"/>	Compliance <input type="checkbox"/>
Initial Enforcement Expectation	Prosecution <input checked="" type="checkbox"/>	I / N <input checked="" type="checkbox"/>	Letter <input type="checkbox"/>	Verbal warning <input type="checkbox"/>
		Simple Caution <input type="checkbox"/>		
Permissioning document impact (table 5.3 only)	Revocation / refusal / direction <input type="checkbox"/>	Amendment / refusal / variation <input type="checkbox"/>	Amendment <input type="checkbox"/>	Letter <input type="checkbox"/>
				Letter / verbal warning <input type="checkbox"/>

### Section 5 – Dutyholder factors<sup>1</sup> (all elements do not always apply)

Is there a record of previous relevant written enforcement action, such as notices, prosecutions, or letters requiring	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is there a history of related incidents, accidents, ill health, etc?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is there a history of previous relevant verbal enforcement?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Did the dutyholder gain or deliberately seek economic advantage from non-compliance?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Level of actual harm arising from the matter under consideration?	Serious personal injury or serious <input checked="" type="checkbox"/>	No serious harm <input type="checkbox"/>	
What is the standard of general conditions?	Poor <input type="checkbox"/>	Reasonable or N/A <input checked="" type="checkbox"/>	Good <input type="checkbox"/>
What is the inspection history of the dutyholder?	Poor <input type="checkbox"/>	Reasonable or N/A <input checked="" type="checkbox"/>	Good <input type="checkbox"/>
What is the attitude of the dutyholder to H&S issues?	Hostile / indifferent <input type="checkbox"/>	Reasonable <input type="checkbox"/>	Positive <input checked="" type="checkbox"/>
From the inspector's assessment of the dutyholder, what is the level of confidence that the duty holder can and will comply?	Little or no confidence <input type="checkbox"/>	Some confidence <input checked="" type="checkbox"/>	Confident <input type="checkbox"/>

### Indicated enforcement action (after considering local factors)

Enforcement	Prosecution <input checked="" type="checkbox"/>	I / N <input type="checkbox"/>	Letter <input type="checkbox"/>	Verbal warning <input type="checkbox"/>	None <input type="checkbox"/>
Permissioning	Revocation / refusal / direction <input type="checkbox"/>	Amendment / refusal / variation <input type="checkbox"/>	Amendment <input type="checkbox"/>	Letter <input type="checkbox"/>	Verbal warning <input type="checkbox"/>

### Section 6 - Strategic factors

Does indicated action coincide with public interest?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are vulnerable groups protected by the action?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will the action result in sustained compliance?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
What is the effect of the action on other dutyholders?	Positive <input checked="" type="checkbox"/>	Negative <input type="checkbox"/>
Will the action result in the benchmark being achieved?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the functional impact of the action acceptable?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Have the principles and expectations of the Enforcement Policy been met?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

### Inspector's considerations

I've assessed the wider circumstances & management weaknesses revealed by our inspection, used table 2.2. because of the potential for multiple casualties

---

### Enforcement action plan (Priorities for action, and timescales)

**If this is already laid out in the INV1, then cross reference**

To be decided but likely to be either a deferred PN on use of unassisted LO protection other than in specific circumstances where justified by other risks, or 2 IN's, the first on planning routine & faulting work to be done in possessions, the second on carrying out work in protected line blockages, or using technology to provide automatic warning or protection, i.e. to apply the risk control hierarchy.

Name of inspector

Tom Wake

Date completed

4/7/2019

---

### Line manager's assessment

**Do you agree the way the investigator has applied the EMM? Should the outcome be modified, if so why? What are the next steps?**

Name of line manager

Date

# References

ORR EPS: [http://orr.gov.uk/\\_\\_data/assets/pdf\\_file/0016/5650/health-and-safety-compliance-and-enforcement-policy-statement-2016.pdf](http://orr.gov.uk/__data/assets/pdf_file/0016/5650/health-and-safety-compliance-and-enforcement-policy-statement-2016.pdf)

Enforcement Management Model

<http://www.hse.gov.uk/enforce/emm.pdf>

Application of EMM by ORR inspectors

<https://www.orr.gov.uk/sites/default/files/om/rig-2003-04-application-of-the-hse-enforcement-management-model-emm-by-rsd-and-rpp-inspectors.pdf>

ORR EMM supplementary guidance, guidance for railway examples:

[http://orr.gov.uk/\\_\\_data/assets/pdf\\_file/0017/6443/supplementary-guidance-to-hse.pdf](http://orr.gov.uk/__data/assets/pdf_file/0017/6443/supplementary-guidance-to-hse.pdf)

HSE EMM supplementary guidance for health risks: [http://www.hse.gov.uk/foi/internalops/ocs/100-199/130\\_5/index.htm](http://www.hse.gov.uk/foi/internalops/ocs/100-199/130_5/index.htm)

Code for Crown Prosecutors: <https://www.cps.gov.uk/publication/code-crown-prosecutors>

<https://orr.gov.uk/rail/health-and-safety/investigation-and-enforcement/our-enforcement-action-to-date>

# Any Questions?

Paul Appleton

HM Deputy Chief Inspector Railways

[paul.appleton@orr.gov.uk](mailto:paul.appleton@orr.gov.uk)