
Risk-based health and safety regulation

Our strategy for Britain's railways

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Thank you very much for the invitation to address you today. It is impossible to overstate the importance of learning from each other, including from other sectors, as we aim for excellence in safety outcomes for the railways. The International Railway Safety Conference is an important chance for us all to exchange experiences, ideas and lessons from practical rail safety regulation around the world.

My messages are that:

- An unsafe industry cannot be an efficient industry.
- The key to both safety and efficiency is excellence in management and leadership.
- Our work as a regulator
 - Pushes the industry towards excellence in management, and
 - Highlights their responsibility to manage risks properly.
- Our approach is based on our strategy for health and safety regulation, which focuses our resources in a proportionate way on the risks.

Excellence in management is key to everything, because

- it is fundamental to getting value for money;
- it is central to commercial focus and success;
- it underpins a focus on delivering for customers; and
- it is critical in keeping people healthy and safe.

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Britain's rail industry landscape.

Let me start with a reminder of the context in which we are working – Britain's rail industry landscape.

The ORR is the combined economic and safety regulator for Britain's railways. Safety is our paramount priority. As an independent regulator, we play a pivotal role in ensuring the industry delivers a safe, effective and efficient system. We hold the industry to account for focusing on the needs of users as well as being responsive to the priorities of funders. But there a number of factors that make regulating the railways more complicated than regulating some other sectors:

Firstly, the scale of Britain's national railway:

- 3.25 million journeys each day
- 28 billion tonne km of freight
- 40,000 bridges, tunnels and viaducts
- 20,000 miles of track
- 2,517 Stations
- 8,200 properties

Secondly – the industry is dealing with substantial increases in customer demand – and customer expectations. This is a good problem to have. Britain's rail industry is a big success story in terms of growth. It moved out of the long phase of managed decline of the late 20th century and into a period of remarkable sustained growth not seen since Victorian times.

- There were 1.4 billion passenger journeys in 2010/11.
- The sector has seen a 44 per cent rise in passenger demand since 2002-03. (Source: ORR data portal – passenger kilometres data)
- And on a more densely-used network, punctuality and customer satisfaction are close to an all-time high.

Thirdly, it is a complex sector:

- The many players: Train operators, Freight operators, Infrastructure managers, Metros, Entities in charge of Maintenance, Rolling stock leasing companies, contractors, suppliers, open access etc,
- The sector is comprised of a number of very different and specific markets – from ticketing, to franchising, to rolling stock, to infrastructure
- The sector has a highly fragmented supply-chain....
- ...AND there are significant monopoly elements in the sector – especially the ownership of the bulk of Britain's national rail infrastructure by a single company, Network Rail.

- The regulatory regime is complex because it is divided between the government – who award and regulate franchise agreements – and the ORR which regulates infrastructure charges, track access and safety. We both determine prices, separately, in our own areas of concern

We think that, for good reasons, this complexity will increase – we envisage a future railway that is larger, more varied and a fundamentally more sophisticated and diverse sector than it is today – moving away from a “one size fits all” is key to tailoring what the industry delivers to what its customers want, so that it can carry more passengers, on a greater variety of services, using new technologies and managed in different ways.

Our strategic priorities as an integrated regulator

For the rail industry to improve its efficiency, progress and grow, it needs a regulatory framework which gives the public assurance that the railways are safe, reliable and efficient. It needs to protect customers, businesses and funders against the effects of monopoly power, and release the potential and entrepreneurship of leaders, managers and innovators to transform the industry.

You will be aware of the difficulties experienced in the last week with the franchising process for passenger services. There are big issues to sort out. But don't lose sight of the big picture: Rail is a success story in Britain: it has seen sustained growth in demand, satisfaction and performance at or near to record levels and the highest passenger numbers since the 1920s on a much smaller network.

Yet costs remain far too high and need to be tackled. The industry is too dependent on government subsidy and investment - yet it's not always that clear where government money goes or what taxpayers are getting for it. We need to keep the pressure up on Network Rail to deliver its regulatory deal on enhancements, performance and other commitments. Through our Periodic Review – which sets the financial framework and the outputs to be delivered for Network Rail, and incentives across the industry, for the five years from 2014-15 – we need to keep up the pressure to reduce costs to no more than a competitive market would allow; and ensure that costs and charges are transparent.

What people sometimes neglect is that safety and occupational health management also has a crucial part to play in improving value for money.

ORR's priorities are:

- reducing the industry's costs
- a sharper focus on customers; and
- Excellence in health and safety culture and management across the industry

Within this, our strategy for health and safety regulation aims to reduce harm, targeting

- zero fatalities and ever-decreasing health and safety risks
- excellence – both
 - in asset management and operations, and
 - in health and safety management and culture
- with the results that
 - management capability across the industry improves;
 - there is a measurable reduction in risks;
 - there is a measurable reduction in harm, and
 - there is a reduced likelihood of multiple-fatality incidents.

Our approach combines checking legal compliance with proactively pushing for excellence in management. Our targeted inspections regime checks legal compliance in the every-day control of risks by businesses in the industry. Our activity is targeted in a way which is proportionate to risk: reflecting our assessment of in which parts of the industry, non-compliance and risk of harm is greatest.

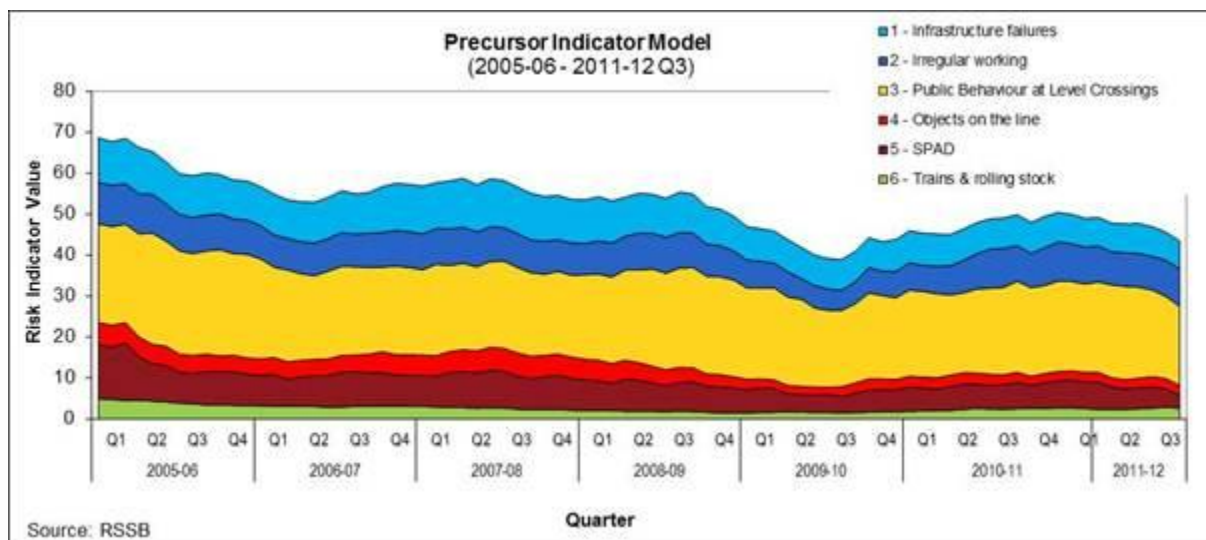
We push for excellence in management by businesses, because excellent management improves the likelihood of safety compliance every day, and also the likelihood of effective risk control. Excellence in management is so important because managers control risks day in, day out, and we know that managers' performance varies over time.

If managers and the businesses in which they operate are already high performing ("excellent"), then there is a greater likelihood that their dips in performance will still be above the legal minimum and risks will be adequately controlled. But if they are only poorly performing ("ad hoc" management"), then there is a greater likelihood that their normal performance (and any dips) will be below the legal minimum, leaving risks are uncontrolled. Our Management maturity model (RM3) – see below - helps us to evaluate the capability of managers to control risks.

Our strategy's goal is reduced harm. Our Annual Health and Safety Report 2011-2012 showed that the overall level of harm had decreased by 12 per cent on the previous year, with no workforce and industry caused passenger fatalities on the London Underground, London Overground and Docklands Light Railway.

On some models, safety performance can be seen to be improving over time. Figure 1 (on the next page) shows the RSSB's Precursor Indicator Model over time, with the contributions of risk drivers such as irregular working, SPADs, and public behaviour at level crossings. The trend is generally downwards, with a 12 per cent decline in risk as measured by the Precursor Risk Model since 2006, and a 6 per cent decline over the last year.

FIGURE 1: Modelled Precursor Risks, 2005-06 to 2011-12.



But despite progress, and an overall downward trend in harm and risk, we know that bad things still happen; and that they are more likely to happen where management is further from excellence. Our inspection & audit findings look at management quality and assess it against our railway management maturity model.

Our most common assessment is that the key aspects of management are found to be “standardised”. This means we find that – as the RM3 model expresses it: *“Leadership in a particular business is still largely viewed as a senior management role”* – as opposed to *“management excellence”* which is described as *“...Leaders at all levels...showing shared values directed at continually meeting the business objectives safely.”* In other words, the more widespread the taking of responsibility and leadership on safety across a business, the less likely it is that bad things will happen, which result in harm to employees, customers or the public.

Our strategy is founded on an understanding of the risk landscape

Our strategy for health and safety regulation is built on understanding the risk landscape and our focus on management improvement. Our understanding of the risk landscape is developed from assessment of accident and incident data, including risk models used by the industry – in particular London Underground’s Quantitative Risk Assessment Model, and the Safety Risk Model for the mainline railway developed by the Railway Safety and Standards Board. We use intelligence from our own inspections, investigations and enforcement activities over a long period; we draw in the findings of the Rail Accidents Investigations Board; as well as the views of experts and intelligence from European and international developments.

So our priorities for regulation reflect a wide range of evidence on where regulation can make the biggest difference in ensuring the risk of harm is well-managed and reduced. This leads us to focus on these risk-led priorities:

- Level crossings
- Interface system safety
- Infrastructure safety
- Rolling stock
- Workforce safety
- Occupational health

And these management enablers:

- Health & safety management systems
- Competency of people & human factors
- Change management

Our strategy builds into our business plan both the **risk priorities** and **enablers, which are** analysed and described in our recently-published “Strategy for health and safety regulation”, and are matched with proportionate resource in our targeted work programmes.

In setting our priorities for resources we have a set of principles – set out in the table below - which help ORR staff to understand the basis on which we prioritise activity, and help them to make better judgements about how they use their time, and what we aim to achieve.

Principles for how we decide on resources and build our business plan...

It is about	It is not about
Balance	Too much in any area: too little or none in another
Proportionate to risk and focused on risk reduction	Proportionate to safety levy payment. The levy is linked to turnover, not risk
Targeted by evidence	Targeted by whim
Right skilled and confident people	Poorly trained people who lack courage
Covering the country	Areas left alone
Knowing the skills you need	Work determined by the skills we happen to have to hand
Letting the duty-holder control risks	Man-marking the duty-holder for no good reason

This means that we are clear about the risk priorities, the programmes of work and our planned activities for each component of the rail industry – main-line, Transport for London, Trams & light railways and the Heritage sector.

Railway Management Maturity Model (RM3)

Trends in instances of accidents and near misses give part of the picture on safety performance. The other part is how well managers can control risk so that such unsafe events don't happen. There would be fewer incidents if the rail industry improved its safety management performance towards excellence, when all of the systems to avoid such events would be working effectively and efficiently.

ORR's Railway Management Maturity Model (RM3), describes twenty-six components of effective safety management, such as leadership, competence and proper risk management. These components and the model are described in more detail on our website.

Different dutyholders are likely to perform at a different level of capability for each component. There are five levels of capability - from 'ad hoc' (or poor); through 'managed', 'standardised' and 'predictable', and ultimately 'excellent'. RM3 describes what you would expect to see at each level for each component. This allows either inspectors or companies themselves to compare the actual situation found in audits, inspections and investigations to the description of what is expected; to deduce where the organisation is on the scale of management capability for that component, and to help them to identify how they can improve.

We use RM3 to judge the management capability of most railway organisations. This includes Network Rail, who use the results pro-actively to target what they should do to address their weaker management areas, and to draw on lessons from areas where management is stronger. I commend this approach.

Turning finally to our own capability as a regulator - we are sharpening up on our own strategy and impact. We are taking a rigorous approach to make sure our work programmes, practices and resourcing choices match our strategy. We commissioned an independent Capability Review of the whole organisation, which identified areas in which our skills and organisation can be strengthened, and we are addressing these.

We are keeping our strategy under regular review. We are identifying the impact of our activities in reducing the likelihood of multi-fatality events using the industry risk models. And we are sharpening up our own management of safety regulation:

- Using the ERA cross-audit results to help us do this.
- Inspection quality: performance of least capable Inspectors comes closer to the practice of our best
- Regulatory decision-making being more clearly in line with our policies.

Conclusion and key messages

I'm going to conclude as I began – with my key messages.

- An unsafe industry cannot be an efficient industry.
- The key to both safety and efficiency is excellence in management and leadership.
- Our work as a regulator
 - Pushes the industry towards excellence in management, and
 - Highlights their responsibility to manage risks properly.
- Our approach is based on our strategy for health and safety regulation, which focuses our resources in a proportionate way on the risks.

Management excellence in each business working on or with the railway is the key to underpinning safety and preventing harm to passengers, workers and the public, just as it is key to achieving value for money and high-quality service in a commercially-driven, customer-focussed industry.

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