

Level Crossings in Great Britain

Martin Gallagher

Head of Level Crossings

Date 00.00.00

Level Crossings

- Over 7000 level crossings on Network Rail Infrastructure (England, Scotland, Wales)
- A legacy from the past when rail and road traffic was very different
- One of the biggest safety risks to the industry in GB
- Most fatalities involve pedestrians, not vehicles.
- Numerous collisions between trains and vehicles per year
- 95% incidents the result of public behaviour
- Viewed as a rail issue in GB, not a road safety issue
- Little standardisation throughout Europe
- Public scrutiny over the safety of crossings increasing despite safety record



Some of the issues.....

- Accidents
- Collisions between road vehicles and trains
- Collisions between pedestrians and trains
- Near misses
- Impact on train drivers
- Impact on passengers
- Impact on communities and families
- Delays and costs
- Reputational damage
- Demand for rail and road is growing, this increases risk



Challenges

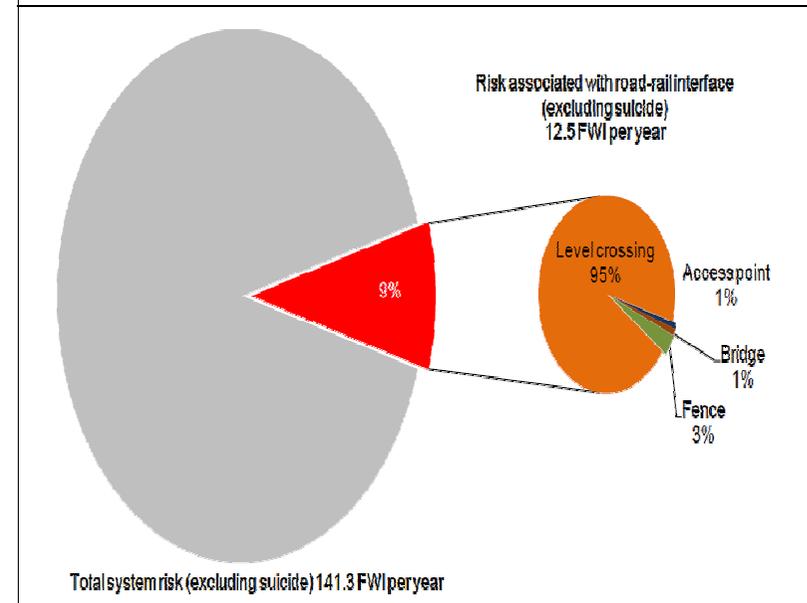
- More trains, longer, faster trains
- More road vehicles & HGV's – relocation of business & commuters
- Increase in scale and type of leisure use
- Increasing need for food and fuel production
- Continually moving to higher output plant /24 hour operation
- Lower perception of risk in society
- Competing priorities for limited investment



Total Railway System Safety Risk in GB in 2009/10

- Level Crossings accounted for 9% of the total system safety risk
- Average of 12 fatalities per year
- Average of 17 collisions with vehicles per year
- Severe criticism from rail regulator, customers and stakeholders
- Expectations around safety have increased with a reduction in major accidents

Chart 117. Risk at road-rail interface by site type (SRMv6)

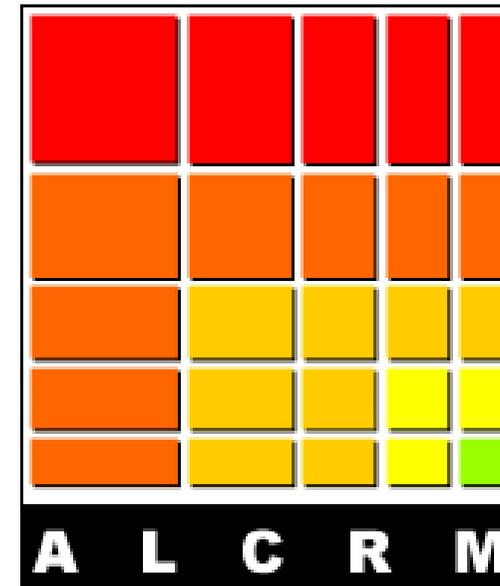


Improvements to Level Crossing Management and Safety

- Strategic objective of reducing system risk by 25% by 2014
- Reducing accidents and incidents
- Improving the risk management regime
- Improving training and competence of staff
- Improved asset quality
- Improved data quality
- Improved relationships with stakeholders
- Better use of technology
- Reduced costs and timescales for safety enhancements
- Learning from partners and research

All Level Crossing Risk Model

- A bespoke risk model for Level Crossings
- Used company-wide for assessing level crossing risk
- A supporting risk management toolkit provides assistance in identifying potential risk mitigation options
- Cost benefit analysis undertaken to determine practicability of implementing options
- Dedicated staff with associated training & competence regime manage level crossings
- Assessment, inspection, implementation , delivery, verification, are contained in a single role locally based
- Policy, guidance, standards, assurance, management reporting, benefits, performance, come from the centre



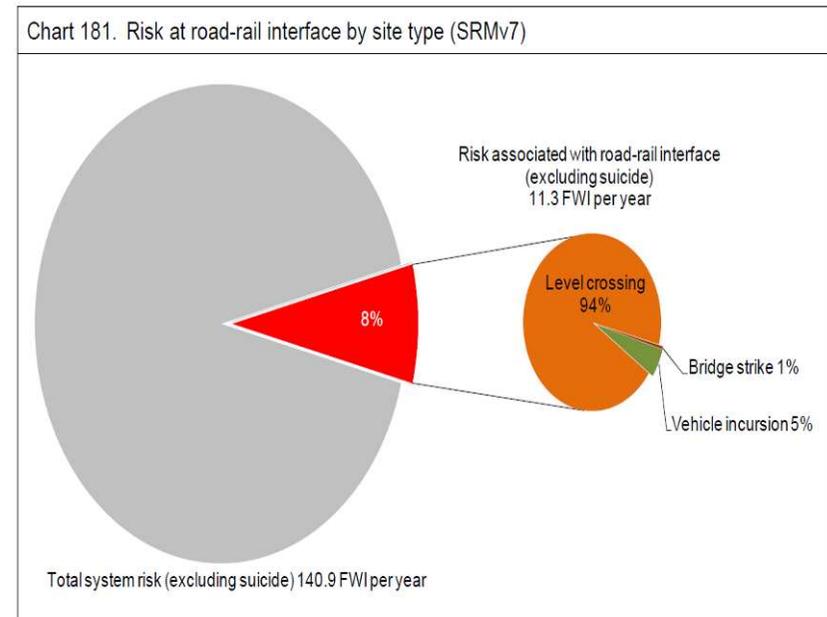
Tactical examples to improve safety

- Engineering
 - Introducing new technology to improve safety, reduce costs and close crossings
- Enforcement
 - First dedicated mobile and fixed enforcement cameras
- Enabling
 - Better qualified staff in dedicated roles
- Education
 - Campaigns and awareness for communities and users

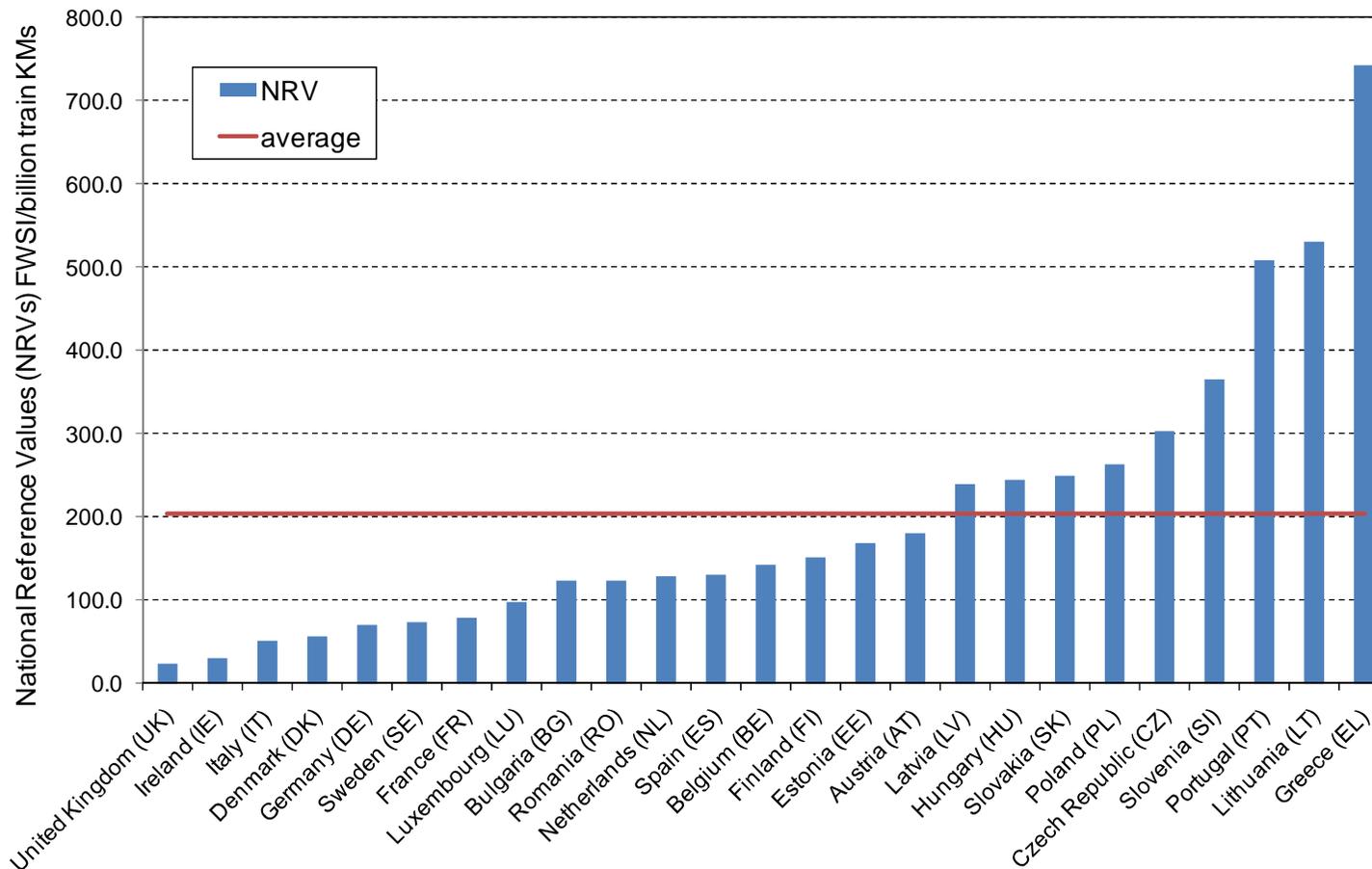


The picture in 2011

- There has been an 11% reduction in Level Crossing risk in two years
- It is now only 8% of total system risk
- On target for 25% reduction by 2014
- Increased investment of 100m Euros to do this
- 2010 /11 = 4 fatal accidents, down by 66%
- 2011/12 = 2 fatal accidents
- Improved performance and reduced delays
- Increased stakeholder confidence
- Increased reputation for managing Level Crossing safety

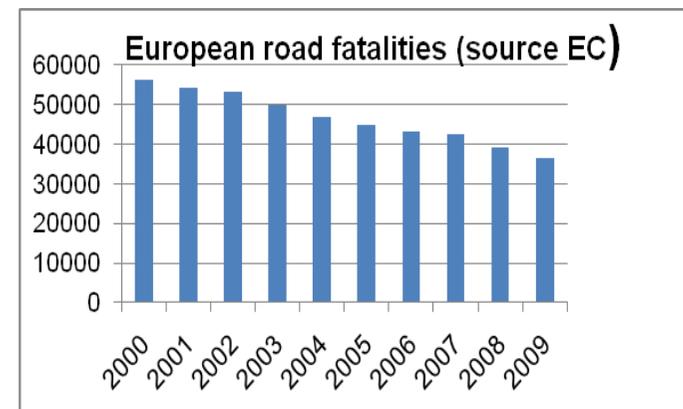
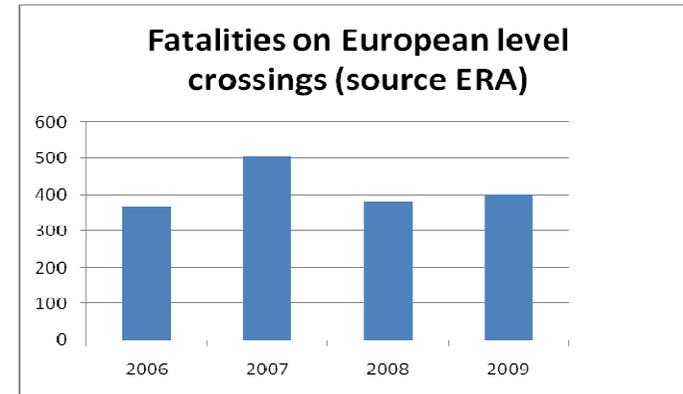


European Rail Agency Safety Ratings for Level Crossings



Level Crossings in Europe

- 120,000 Level Crossings in Europe
- Average 412 fatalities at Level Crossings per year in Europe
- European Road Safety Charter and Action Plan, and specific policies in member states, have been very successful in reducing the number of fatalities on the roads by 30% since 2000.
- No impact in Level Crossing statistics



Finally.....

- Thank You for giving me the opportunity to speak today!
- Martin.gallagher@networkrail.co.uk
- Head of Level Crossings, (England, Scotland, Wales)