Welcome to RIHSAC 94

Dilip Sinha, Secretary, RIHSAC

15 October 2013
Who’s minding the gap?

**John Cartledge**

*Safety Policy Adviser*

Presentation to RIHSAC
15 October 2013
Why does platform edge risk matter to passengers?

![Graph showing risk factors and outcomes for platform edge incidents. The graph compares different types of incidents such as slips, trips, and falls; platform-train interface; assault and abuse; on-board injuries; train accidents; contact with object or person; struck by train on station crossing; and other types of passenger injury. The data is sourced from SRMv7.5.]
“At Clapham Junction the height gap between the platform and the trains on platform 15 is a health and safety issue. Towards the eastern end of the platform I have seen elderly people unable to disembark because the gap was unmanageable.”
Yes, I do mind the gap – you don't have to be drunk to fall under a train

As public information campaigns go, this one seemed a cracker. Travelling while you're drunk is dangerous; and to make the point in the runup to Christmas, British Transport police have released CCTV images of a drunken passenger on a train as she staggers off it.

Thankfully, the woman in the film is fine, because someone saw her fall and the train was delayed while she was hauled from under it. But seeing those images makes me furious, because despite what Network Rail might like us to believe, you don't have to be drunk to fall under a train. According to the staff at my local station, Clapham Junction in south-west London, it happens to entirely sober passengers on a regular basis, because of ever-bigger gaps between platforms and trains.

I know this is true, because over the last three years my daughters, who travel to secondary school through Clapham Junction, have twice told me about incidents in which friends of theirs fell on to the tracks. Both times, as with the drunk woman in the British Transport police video, the trains were delayed while the girls were rescued.

More recently my husband, who also commutes through Clapham Junction, was about to board a train on his way to work when a female passenger just ahead of him did exactly the same as the woman in the video: she lost her footing and disappeared on to the tracks. He pulled her out, and then helped her on to the train; although shaken, she made an "announcement" to the passengers in the carriage that my husband had just saved her life.
Yes, I do mind the gap – you don't have to be drunk to fall under a train

So my point is this: it's fine for the British Transport police to make us aware of the dangers of being drunk, but why aren't they – and Network Rail, whose responsibility this is – doing more to make their platforms safer? At the moment, all they have are some chipped and faded and barely visible signs telling you to "mind the gap", and an occasional warning announcement.

But of course it's much easier to blame drunken passengers than to look at your own shortcomings. So to help Network Rail out, I've been down to Clapham Junction with a measuring tape. I stood on Platform 15, the platform my children use each day, and I measured the gap between platform and train on six departures over a 10-minute period. The biggest gap I measured was 51cm on the 15:11 train to Sutton; the smallest gap I measured was 46cm on the 14:54 train to Epsom.

Every one of the gaps I saw was easily big enough for a passenger, especially a child-sized one, to fall through and on to the track. Twice I helped passengers who were struggling to get on to the train safely; one was an older woman with a suitcase who was unable to lift it across the gap on to the train, and the other was a woman with a toddler and a pushchair. She needed both hands (and another passenger's help) to lug the pushchair on to the train, and the only way she could do it was to leave hold of her toddler's hand, leaving him at risk of falling on to the track.
Joanna Moorhead
Thursday 22 December 2011

Yes, I do mind the gap – you don't have to be drunk to fall under a train

Does Network Rail care about these dangers? According to the platform staff this afternoon, the problem is that the platforms weren't built for modern trains, and improving them to reduce the gap would cost too much. I wonder whether that's what they'll be saying when the day comes when a child falls on to the track and dies? I suspect not; because on that day, we'll all agree that any amount of money is worth spending to keep our children safe.

So listen up, Network Rail. Those are my daughters and their friends who are falling on to your tracks. If I'm angry now, I'll be incandescent on the day that accident happens. And it will. That's what station staff told me today: because higher passenger numbers (which you have) mean more platform crowding and more accidents.

So instead of shocking us with pictures of drunks, start thinking about how to keep my children and all your other passengers safe. And please, do it now.
News

Railway Injury – Falling Down the Gap

Posted on December 28, 2011
Written by Sarah Healey

Hitting the news this week has been the shocking CCTV footage of a woman involved in a railway injury when she fell down the gap from the train to the railway line.

However, reports have revealed that the lady who arrived at Bamsley Station was in fact drunk.

Railway Injury – In the News
MIND THAT GAP is a non-profit Organisation formed after the tragic death of Simon Slade who fell into the gap between the train and platform at Gidea Park Station. Simon's fall was not seen by anybody, not even the train dispatcher who had rushed back to his office and Simon lay on the track for 45 minutes and another three trains ran over him. Simon was still alive when he was found.

The primary function of the organisation is to improve safety on platforms by raising awareness of hazards like Gaps and attempting to reduce them.
Passenger risk at the platform-train interface

If you would like to give feedback on any of the material contained in this special topic report please contact:

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© Rail Safety and Standards Board 2011
RIS-3703-TOM
Rail Industry Standard for Passenger Train Dispatch and Platform Safety Measures
Issue One June 2011
Rail Industry Standard
Passenger accident at Brentwood station
28 January 2011
Learning points:

**Monitors** should be visible (sighting) and clear (picture quality).

**Drivers** need to perform the train safety check in accordance with the Rule Book.

**Driver training** needs to support the above.

**Train door forces** need to allow trapped objects to be extracted in an emergency.

**Passengers** should be made aware of the risks from boarding and alighting trains.

**Stepping distances** should be checked to see if they are within safe limits.
Appendix A
Stepping distances

Underside step clearance to meet section B6.2 of this document

Nominal Platform Position (GC/RT5161)

Limiting area within which front edge of step must lie for all radii down to 160 m, when stationary adjacent to a platform

250 mm

130 mm

50 mm

275 mm

350 mm
Research Brief

Investigation of platform edge positions on the GB network

T866 - October 2011

<table>
<thead>
<tr>
<th>Average platform offset (mm)</th>
<th>&lt; RGS limit</th>
<th>Within RGS</th>
<th>&gt; RGS limit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; RGS limit</td>
<td>323</td>
<td>299</td>
<td>486</td>
<td>1,108</td>
</tr>
<tr>
<td>Within RGS</td>
<td>264</td>
<td>384</td>
<td>537</td>
<td>1,185</td>
</tr>
<tr>
<td>&gt; RGS limit</td>
<td>986</td>
<td>981</td>
<td>1,411</td>
<td>3,378</td>
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<tr>
<td>Total</td>
<td>1,573</td>
<td>1,664</td>
<td>2,434</td>
<td>5,671</td>
</tr>
</tbody>
</table>
The diagram illustrates the relationship between horizontal and vertical dimensions and their impact on user satisfaction. The grid is divided into three sections:

- **Acceptable**: This section includes points where the horizontal and vertical dimensions are below the GM/RT2149 Limit. It is shaded in green.
- **Unacceptable**: This section includes points where the dimensions exceed the GM/RT2149 Limit. It is shaded in red.
- **GM/RT2149 Limit**: This line represents the maximum acceptable dimensions according to the GM/RT2149 standard.

The percentages indicate the percentage of participants who felt a little unsafe or worse, depending on the position of the data points on the grid.

- At the intersection of 63% in the vertical and 300 mm in the horizontal, 32% of participants felt a little unsafe or worse.
- At the intersection of 22% in the vertical and 160 mm in the horizontal, 63% of participants felt a little unsafe or worse.
- At the intersection of 4% in the vertical and 100 mm in the horizontal, 22% of participants felt a little unsafe or worse.
- At the intersection of 7% in the vertical and 200 mm in the horizontal, 33% of participants felt a little unsafe or worse.
- At the intersection of 20% in the vertical and 250 mm in the horizontal, 37% of participants felt a little unsafe or worse.
- At the intersection of 38% in the vertical and 300 mm in the horizontal, 71% of participants felt a little unsafe or worse.

The diagram visually represents how increasing dimensions beyond the acceptable limit can significantly affect user satisfaction.
Accessible Train Station
Design for Disabled People:
A Code of Practice

Version 03 – Valid from 1 November 2011

A joint publication by
Department for Transport
and Transport Scotland

November 2011
4.6.2 The speed of boarding and alighting can also be affected by significant stepping distances between rolling stock and platform. Large steps both vertically and horizontally are likely to slow passenger flows boarding and alighting. The provision of a reduced stepping distance from train to platform has the potential to improve the speed of passengers boarding and alighting, quite apart from the clear benefits to those with reduced mobility or carrying luggage.
Rail Accident Report

Fatal accident at James Street station, Liverpool
22 October 2011

Report 22/2012
October 2012
The objective of this recommendation is to reduce the likelihood of falls through the platform edge gap.

Merseyrail, in consultation with Merseytravel, Network Rail and other relevant industry bodies, should evaluate equipment and methods that reduce the likelihood of a person falling through the platform edge gap. Platform edge gap fillers and vehicle body side panels should be included in the evaluation, the outcome of which should be a plan to implement measures when appropriate to do so, for example when trains or the infrastructure are changed, improved or replaced.
And finally ...
Thank you
Platform / train interface: presentation by London Underground Limited
## London Underground’s risk profile

<table>
<thead>
<tr>
<th>Top Event &amp; Contribution to Network Risk</th>
<th>Risk (Fatalities per year)</th>
<th>Risk Category</th>
<th>Current ranking (previous 2011.01 ranking)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform Train Interface (26%)</td>
<td>1.88</td>
<td>Medium</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Unauthorised Access to Track (22%)</td>
<td>1.65</td>
<td>Medium</td>
<td>2 (2)</td>
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<tr>
<td>Stairs &amp; Assaults (10%)</td>
<td>0.77</td>
<td>Medium</td>
<td>3 (3)</td>
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<tr>
<td>Ventilation Hazard (8.4%)</td>
<td>0.62</td>
<td>Low</td>
<td>4 (4)</td>
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<tr>
<td>Train Fires (7.7%)</td>
<td>0.57</td>
<td>Low</td>
<td>5 (5)</td>
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<tr>
<td>Escalator Incidents (4.5%)</td>
<td>0.33</td>
<td>Low</td>
<td>6 (6)</td>
</tr>
<tr>
<td>Derailment (2.8%)</td>
<td>0.20</td>
<td>Low</td>
<td>7 (7)</td>
</tr>
<tr>
<td>On Train Incidents (2.7%)</td>
<td>0.20</td>
<td>Low</td>
<td>8 (8)</td>
</tr>
<tr>
<td>Power Failure (2.7%)</td>
<td>0.20</td>
<td>Low</td>
<td>9 (10)</td>
</tr>
<tr>
<td>Lift Fires (2.5%)</td>
<td>0.18</td>
<td>Low</td>
<td>10 (9)</td>
</tr>
<tr>
<td>Flooding (2.2%)</td>
<td>0.16</td>
<td>Low</td>
<td>11 (11)</td>
</tr>
<tr>
<td>Station Fires (2.09%)</td>
<td>0.15</td>
<td>Low</td>
<td>12 (12)</td>
</tr>
<tr>
<td>Collision Between Trains (2.05%)</td>
<td>0.15</td>
<td>Low</td>
<td>13 (13)</td>
</tr>
<tr>
<td>Collision Hazard (1.09%)</td>
<td>0.08</td>
<td>Low</td>
<td>14 (14)</td>
</tr>
<tr>
<td>Explosion (1.02%)</td>
<td>0.07</td>
<td>Low</td>
<td>15 (15)</td>
</tr>
<tr>
<td>Arcing (0.78%)</td>
<td>0.06</td>
<td>Low</td>
<td>16 (16)</td>
</tr>
<tr>
<td>Structural Failures (0.37%)</td>
<td>0.03</td>
<td>Low</td>
<td>17 (17)</td>
</tr>
<tr>
<td>Lift Incidents (0.36%)</td>
<td>0.03</td>
<td>Low</td>
<td>18 (18)</td>
</tr>
<tr>
<td>Tunnel Fires (0.21%)</td>
<td>0.02</td>
<td>Low</td>
<td>19 (19)</td>
</tr>
<tr>
<td>Escalator Fires (0.21%)</td>
<td>0.02</td>
<td>Low</td>
<td>20 (20)</td>
</tr>
<tr>
<td><strong>Total LU Group Risk</strong></td>
<td><strong>7.36</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Procedural framework for reducing risk.

- Rule Book for PTI
- Staff training
- Engineering assurance
- PTI groups
- Daily checks of PTI CCTV equipment
S stock objective and analysis

- Determine how to maintain the ALARP position with a level access vehicle assuming some 9m crossing events per day.

- Comply with the Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations (RVAR) 2010, by providing no more than a 75mm horizontal gap or a 50mm vertical step.

- Reduce the step/gap at the non RVAR doorways to provide as much fully accessible platform as possible.

- Use all assets to create the combined desired PTI.
The S stock PTI development

- Detailed assessment of Step and gap using Laser guided measuring tools - anomalies investigated by site visit – assessment conducted every 3-5m
Curvature

- Understand curved platforms and optimise the stopping position to reduce overall risk – end result of four doors where no improvement could be achieved
Identifying specific risk doors on curves
Create a suite of solutions

- Platform, track and train based solutions based on optimised stopping position.
- Track maintained/Tamped/Replaced to nominal 950mm height.
- More intelligent door systems/safeguards.
- In cab CCTV better quality images.
- Platform humps.
- Nosing stone realignment.
- Barriers to slow runners
- Under platform lighting and reflective strips
- Signage.
- Customer education campaign
- Mechanical & fixed perishable gap fillers
In-cab platform cctv

Highlighting the risk area
Awareness campaigns.
Customer Awareness

Poster

Platform sticker

Caution!
Watch your step when boarding and alighting

On-train panel poster

Caution!
Watch your step when boarding and alighting

Leaflet

New trains are now running on the Metropolitan line. They are more spacious with wide through carriages and air conditioning. They also feature designated spaces for wheelchair users and lower floors. The introduction of the new trains has significantly decreased the gap between the train and the platform at the following stations:

- Baker Street
- Euston
- Liverpool Street
- Stratford

Please take extra care when getting on and off trains at these locations.

London Underground is undertaking a comprehensive improvement programme to boost capacity, increase reliability and enhance accessibility across the network. For full details of the improvement plan visit tfl.gov.uk
Physical mitigation
PR13: feedback from the draft determination consultation

Ian Prosser

RIHSAC 15 October 2013.
Policy decisions were set out in our draft determination – published on 10 June. This was a consultation document.

NR, funders and others, including railway operators and trade unions, responded by 4 September.

Responses were considered and the ORR Board made their final policy decisions on 1 Oct.

The Final Determination will be published on 31 Oct.

NR produces its draft delivery plan, setting out how it will meet the outputs required in the determination in Dec. This is a consultation document.

NR produces its final delivery plan in March 2014.

1 April 2014 – all systems go…
Health and safety has been considered throughout the process.

- ORR’s safety staff have brought:
  - Knowledge of the key risks;
  - Understanding of NR’s capability to manage those risks from:
    - Inspection, investigations;
    - RM3 management capability judgments from evidence.
  - Understanding of the workforce issues and management and leadership challenges.
  - A focus on where targeted spending could make the biggest difference to control of risk.
PR13 – These are the challenges for Network Rail that have important health and safety implications…

- Delivery of track maintenance and renewals (includes off-track in CP5)
- Train performance targets
- Structures and earthworks maintenance
- Implementation by NR of its Safety and Wellbeing and Health and Wellness strategies.
- Level crossings safety
- Enhancements delivery
Looking at track Maintenance, there are safety implications that we’ve considered around…

- Efficiencies offered by NR are dependent on:
  - new ways of working, including
    - risk-based maintenance,
    - multi skilling
    - and remote condition monitoring.
  - These will require cooperation from the workforce

- On exit from CP4:
  - NR will not have met its maintenance volumes
  - Will be implementing fundamental changes – eg business critical rules
  - But have good asset policies that should mean a safe railway if implemented.
Looking at train performance....

- Targets set by governments in their HLOSs
- Our role to see if targets are realistic and include or amend them for the determination.
  - Draft determination had a floor of 90% ppm,
  - Many responses on this aspect which we have considered
  - Results in the final determination.
- We will inspect to ensure balance between safety and performance is achieved.
On civils and enhancements...

- Safety challenge is to ensure that NR tackles the high risk structures, rather than just deliver numbers.
- Asset information is recognised by both NR and ORR as needing to improve.
- Enhancements programme important as it can avoid intensive maintenance on old assets, and therefore eliminate some more risky operations.

The final determination will show how costs of the enhancements programme have been considered.
On Workforce Safety….issues considered included…

- Taking safer and faster isolations (AC and DC).
- Developing technologies to alert workers of approaching trains.
- Developing a prototype RRV to replace the current excavator.
- NR has published its Safety and Wellbeing strategy, with some early actions. NR proposes to eliminate all fatalities and major injuries by 2019.
- Better management of health by NR.
- Final decisions on these areas will be announced on 31 Oct.
On Level Crossings safety...we considered

- NR’s proposal to deliver a plan of projects in CP5 to maximise reduction in risk of accidents.
- A ring-fenced fund.
- How we might monitor delivery.
- How this will work with NR’s legal duty to make safety improvements during day to day business of renewals and upgrades.
Health and safety thinking has been integral to the process of making the determination:

- In advice to Ministers on targeted spend;
- In detail of the draft determination;
- In Board decisions leading to the final determination.

Using:

- On-the-ground knowledge of the risks and management capability of NR and other players.
Recent European (& Canadian) accidents

John Gillespie
RIHSAC 15 October 2013
The incidents in July 2013…

- **6 July - Lac-Megantic in Quebec**
  - runaway 72-car crude oil-laden freight train part derailed causing a explosion and fire that destroyed 40-buildings and killed 47-locals.

- **12 July - Breitigny-sur-Orge, France**
  - passenger train derailed at high-speed on a fishplate jammed in a crossing and came to rest under the station canopy, killing six and injuring 62.
The incidents of July 2013…

• 25 July - Santiago de Compostela, Spain
  • Over-speeding passenger train derailed at high-speed killing 79 and injuring 94 passengers

• 29 July - Granges-pres-Marnand, Switzerland
  • Two passenger trains collided head-on after SPAD killing one driver and injuring 35-passengers.
Lac-Mégantic on fire,
6th July 2013
How did it happen? …

- The train was planned to be left unattended on a publicly-accessible running line which had no runaway protection (such as trap points, catch points or derailers), despite there being a downhill gradient towards Lac-Mégantic.

- Risks: tampering, vandalism, runaway.

- The train had been secured using handbrakes and by keeping one of the locomotives running to keep the air brakes operative throughout the train.

- Risks: handbrakes known to be inherently weak, unattended locomotive could have shut itself down at any time due to failure.
Loco shut down by the fire service due to a minor fire. Railway employee had been present. Railway control were aware.

- **Failing:** locomotive not re-started after the fire
- After about one hour the air brakes leaked off and the handbrake forces were not sufficient to hold the weight on the gradient

- **Failing:** foreseeable consequence
Could it happen here? ....

Swiss Cheese
Industry structure:
  • UK does not have vertically integrated ‘shortlines’.
  • a mixed traffic/operator railway gives discipline and visibility.
  • Railway Group Standards apply.

Industry good practice:
  • dangerous goods trains are not left unattended on running lines.
  • loops, yards and depots have trap points.
  • handbrakes, air brakes, scotches are used

Regulatory Regime
French passenger train derailment near Breitigny-sur-Orge station July 2013
Loose fishplate jammed in diamond crossing 200-metres before Breitigny-sur-Orge station
Supposed reason for overthrowing
Could it happen here? ....

Swiss Cheese
Fishplates not welds only used at 23 sites on 100mph lines to secure track to switches and crossovers. Enables rail expansion/contraction.

Effective if well-maintained (including lubrication to ease movement): need regular ultrasonic-testing to identify development of tiny flaws within steel. Regular rail-head grinding removes flaws.

Fishplate breaks were a historic problem and have increased 30% over the last three years but reversed in 2012-13.

Network Rail has a longer-term plan to lose bolted rail ends and use welded joints for rails and switches and crossings.

Lessons from Southall East derailment learned.
Spanish crash: Emerging investigation findings:

- No high-to-conventional line-speed design control transition (only effective above 124mph; train passed at 121mph); the driver was the sole speed-transition risk control;

- Driver distraction: he had been on the phone to a train guard seconds before crash;

- Hybrid train-set stability and crashworthiness concerns: top-heavy front diesel generator car seen to topple first and derail set. Articulated mid/rear cars jack-knifed and one lost structural integrity causing fatalities; and

- Poor passenger survivability: 79-deaths; too high for non-head-on derailment/collision.
Sound warning Entry signal balise

Speed limit changes to 80 km/h (no time limit)

Derailment occurs

Emergency brake applied

Train comes to a halt

Asfa Balise
E7 entry signal

Speed limit 80 km/h.

E7 Entry signal

179 Km/h.

0 Km/h.

10 seconds.

Final position

Lado Santiago de Compostela
Could it happen here? ....

Swiss Cheese
Likelihood affected by…

• Signs/TPWS+ reduces over-speeding approach control at higher risk (line converging) junctions and signals.

• TPWS+, designed to bring trains travelling up to 100mph to a halt within the safety overlap, but ineffective (of stopping train within safety overlap) above 100mph.

• Historic British over-speed derailments on Morpeth curves; now 50mph TPWS-monitored speed restriction.

• Annually, 30-40 high-risk over-speed interventions; where TPWS intervened before driver braking. RSSB initiative to identify common ‘over-speeding before significant line-speed reductions transition’ sites.
Likelihood affected by….

• Known TPWS weaknesses.

• Need for careful future ERTMS to conventional line speed-transitions risk control

• GB uses passive interior passenger survivability approach; resisted in Europe, but supported by ERA. RSSB 2012 research

• Mobile phone usage banned here, but cases of driver distraction remain a focus of our work;
Swiss SPAD-caused passenger train collision July 2013
What happened?

• Train leaving station passed signal at red and collided with approaching train.
• Station staff possibly gave incorrect 'Right Away' signal.
• Driver killed, 35-passengers injured, five seriously.
• On-going ‘Swiss RAIB’ investigation. Plans to accelerate ERTMS fitment.
Swiss SIGNUM automatic train protection system is only partially effective at reducing SPAD risk:

- It only has a warning/stop function, no over-speed supervision, and no departure-stop function when combined with a station passing loop.
- System is designed to slow down a train passing a red signal; often not before it reaches a potential conflict point. Simplified station signal layout has only one departure signal for all its tracks.
- Perhaps surprisingly, there have been other similar incidents on Swiss railways in 2013.
Could it happen here? ....

Swiss Cheese
• Driver Reminder Appliance (DRA), the driver must proactively reset before the train can move.
• TPWS which is designed – where track and infrastructure layouts allows – to automatically stop trains within the safety overlaps and before it reaches a potential conflict point.

Weaknesses:
• “Reset and continue” (few)
• In-service monitoring poor
• Coverage of TPWS: only effective where fitted & up to 75-100mph;
• Trains travelling above 75-100mph could reach conflict point.
Summary …industry & ORR must focus on the risk controls and their efficacy with crashes in mind.

Swiss Cheese
European Safety Policy update: RIHSAC

Alan Bell

15 October 2013
4th Railway package: background

- European Commission – “rail markets stagnating or declining”
- Few new rail services
- Measures needed to encourage innovation & open markets
- Technical Pillar covers safety and interoperability
issue being addressed: delays in vehicle authorisations & costs for industry

Irish Presidency text – ‘general approach’ reached

significant change from original EC proposals

European Parliament amendments not yet considered
area of use declared by RU

for cross-border vehicles, ERA issues authorisation to place on the market

if vehicle is to be used in only one member state (MS), applicant can choose ERA or NSA

RU then checks compatibility for area of use

Board of Appeal for applicants

Fixed installation signalling authorised by ERA (other types of infrastructure by NSAs)
delays in safety certification also seen as problem
EC proposal to move to single safety certificate (no part A / part B)
Presidency proposal – align with ‘general approach’ on interoperability
applicant declares ‘area of operation’
ERA delivers certificate if area of operation is in more than one MS
ERA consults all relevant NSAs to assess compliance with national rules
if operation is in one MS only, applicant can choose ERA or NSA
4th Railway Package – Safety Directive (III)
Alternative suggestion by some MS

- For cross-border services, certificate delivered by ‘lead NSA’ which consults other NSAs within the area of operation
- if operation is in only one MS, certificate delivered by the NSA for that MS
- mutual recognition of certificate by NSAs
- arguments on why safety certification differs from interoperability
- alternative could avoid conflict of roles for ERA?
- simpler processes? Avoids need for ERA charging regime
extension of duties to other actors, including consignors, loaders, fillers, unloaders, unfillers etc.

Proposed extension of mandatory certification to ECMs for other vehicles (already applies to freight). And to maintenance workshops

restrictions on ability of MS to introduce new national rules

removal of many existing national rules & transparency of remaining ones

SMS changes and further specification of assessment criteria for safety certification

general approach expected to be agreed in October
Other developments

- revised Common Safety Method for risk evaluation & assessment [in force but only applies from 21\textsuperscript{st} May 2015]
- CSMs for supervision & monitoring [apply from 7\textsuperscript{th} June 2013]
- Train Driver Licensing – applies to new domestic services from 29\textsuperscript{th} October 2013 (all drivers from 29\textsuperscript{th} October 2018)
House of Commons Transport Select Committee inquiry into level crossings.

Forthcoming consultation document on revised regulations on train protection & other matters.
The reality is that people need to cross the railway....

....with....

- More trains running faster
- More road traffic
- Bigger farm machinery crossing more often
- More pedestrians with modern behaviour living with a faster pace of life.
Our approach is to...

1. Help closures happen
   - All risk assessments of crossings to consider closure first

2. Better risk assessment by Network Rail. Check people understand the risks and controls
   - Competent people leading risk assessments
   - All parties working together to consider risks and controls
     - Businesses, TOCs and users
   - A risk management plan for each crossing
   - Influencing behaviour of users and perception of risk.
Our approach is to....

3  Encourage innovation and new technologies
   - In bridging & underpasses
   - In level crossing design and fitment
   - In specific controls at each crossing
     - one-size-fits-all “types” of crossing do not fit

4  Oversee Network Rail ring-fenced spend to reduce risk at level crossings in the next 5 years.

5  Implement the Law Commission improvements to the law on level crossings.
Summary

- We expect the rail industry to achieve:
  - Effective, collaborative risk assessments
  - Focus first on closure possibilities
  - Innovation in controls

- …leading to reduced risk, and reduced harm…

- …and a better performing network, with fewer delays caused by level crossing collisions or near hits.
Consultation document on changes to Regulations…

- Origins in Government “Better Regulation” and “Red Tape Challenge”
- Three sets of Regulations:
  - Train protection
  - Miscellaneous provisions (brakes, fencing, communication chords etc)
  - Metrication
- To one set:
  - Train protection