

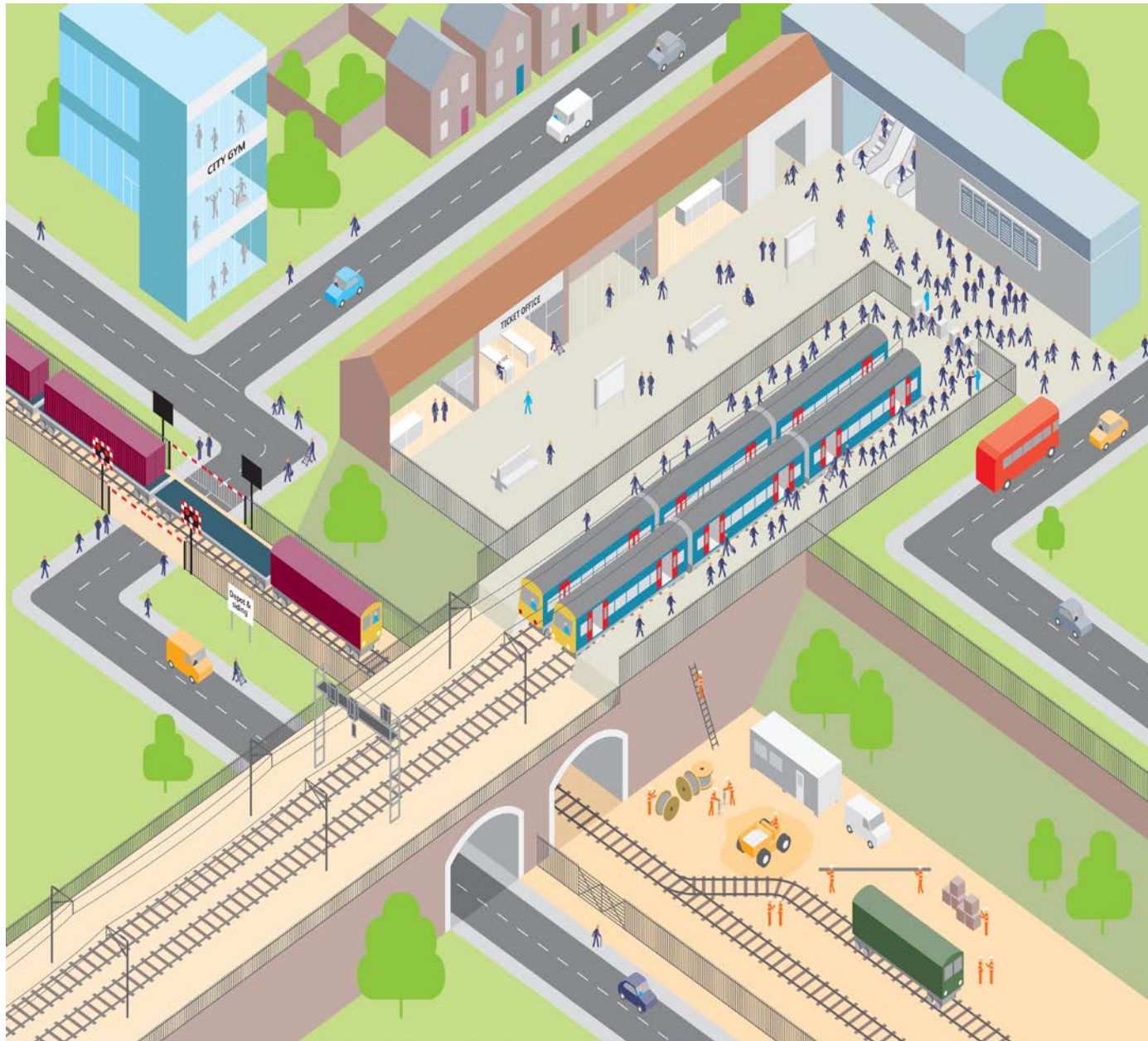
Welcome to RIHSAC 101



Dilip Sinha, RIHSAC Secretary

8 February 2016

“Leading health and safety on Britain’s railway”





RIHSAC

**RSD Work Programme
FY 16/17**

Johnny Schute

Process

■ Business planning meeting - Jan 16

- Teams offer up activity against strategic direction.
- cross-references strategic risk priorities against 'ground truth' supplied by inspectors.
- Sets a priority for activity.
- Endorsed by Director, Railway Safety.
- Loaded to BMS.

■ Manning in RSD

- 111 FTE, reducing to 109 FTE by year end.
- 129 people employed.

Routes

- Level Crossings – maintenance, inspections and risk assessments
- Occupational Health – HAVS, COSHH, Asbestos, Stress, MH
- Workforce safety – lineside, possession management, electricity
- Asset management
 - Off track – fencing, vegetation and drainage.
 - On track – S&C, track integrity, maintenance and renewals volumes
- Civils – buildings, earthworks and structures
- Signalling – renewals
- Human factors – ROCs, maintenance
- Electricity
 - 3rd rail (isolation/earthing/heating)
 - OLE (SBD, new build, existing testing and earthing)

Projects

- Level crossing project
 - Whistle boards
 - Long sections

- Track
 - Dynamic track geometry performance.
 - Extreme weather risk.
 - Automated inspection regimes
 - Track worker safety

- Civils
 - Deferred renewals
 - High risk earthworks in adverse conditions.
 - Inspection and maintenance of ancillary structures
 - Safety critical drainage assets.

- Electrical
 - New/upgraded AC electrical traction.
 - Planning OLE work under existing infrastructure
 - Life saving rules
 - DC faster and safer isolations

TOCs, FOCs and Heritage

■ Freight

- ECM update to ERM

■ Heritage

- Continued development of RM3

■ TOCs

- degraded working
- vehicle incursion
- low adhesion
- multi-SPAD signals
- trespass and vandalism
- PTI

Regulation

- Pursuing RAIB recommendations
- Publication of annual H&S report.
 - Enhanced analysis and horizon scanning with improved data analysis.
- RSSB
 - 5 year review.
 - Review of ORR approach to sub-groups.
- Train Driver licensing – on-going introduction.
- Review of ORR role for ECM certification.
- Policy for CSM monitoring.

Policy

- Safety by Design
 - Guidance to inspectors
 - Engagement with Crossrail and HS2
- ROGS – Statutory review.
- Level crossings – amendment to legislation.
- Support to PR18 workstreams.

Policy (Europe)

- Implementation plan for 4th Railway package.
- IGC's annual H&S report to ERA.
- Authorisation of
 - Eurotunnel GSM-R installation
 - Eurotunnel HGV shuttles
- Safety certificate renewals
 - DB Schenker
 - Eurostar

Occupational Health and Human Factors

- Policy, development or guidance on
 - Respiratory disease
 - Effluent
 - Silica dust
 - HAVS
- Fatigue management.

Risk, Competence and Compliance

■ Systems safety

- Continued development of RM3
- Updating strategic risk chapters, developing a hierarchy of risk within each risk group.
- Additional risk manager being recruited

■ Competence

- Continued internal staff training, on track, legal etc
- Aim to improve the internal RSD competence framework to include policy and admin

■ Compliance – work on ensuring consistency in safety certification.



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Any
questions?



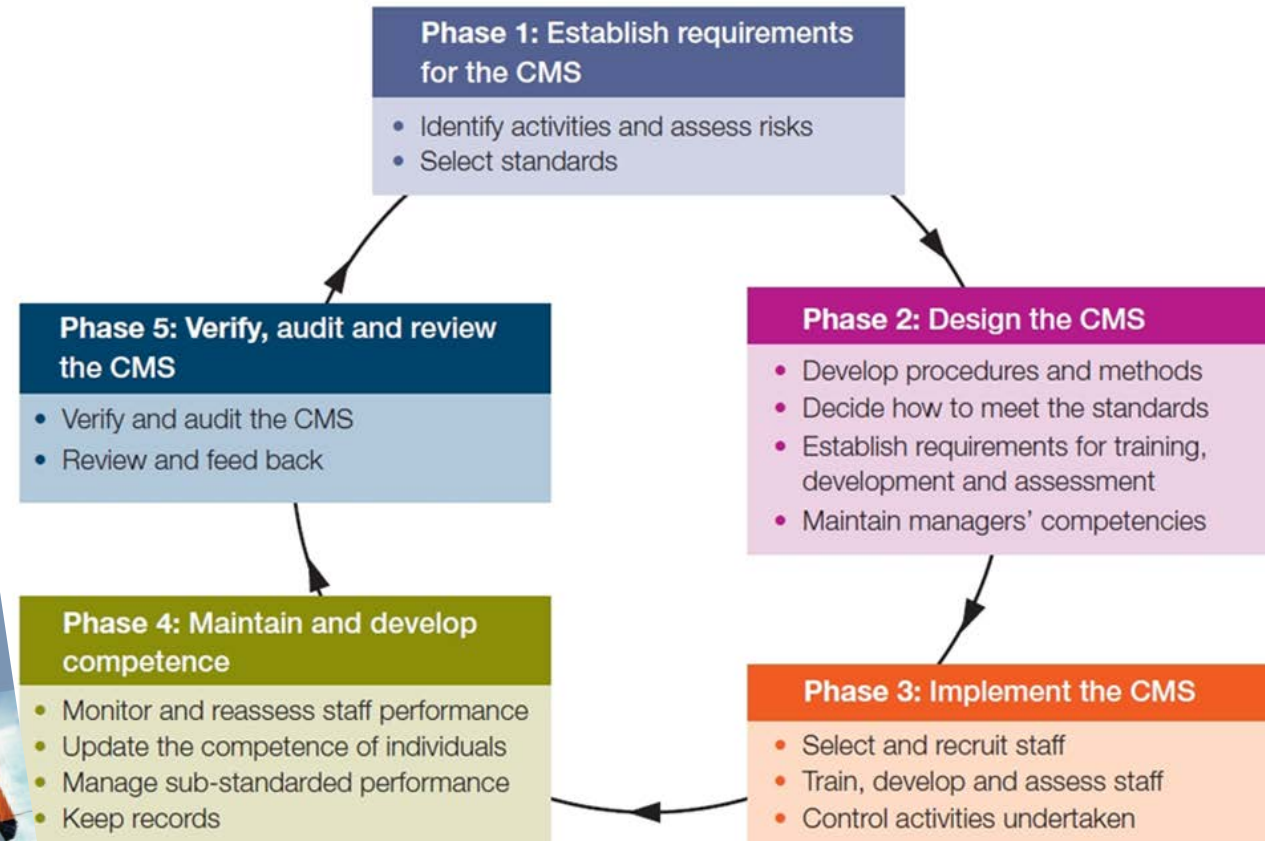
Revising ORR's competence guidance

Jeremy Mawhood,
ORR Central Specialist
Inspectors Team, ORR

RIHSAC meeting, 8 Feb 2016

Developing & maintaining staff competence

RSP1 – current version (2007)



Current guidance : from our day-to-day work:

- Outlines a sensible, high-level, logical Competence Management System
- Understood and well respected in rail (and other) industries
- Bulk of content is fine, but...
- Needs updating e.g. no reference to :
- recent progress in competence management, especially Non-Technical Skills (see later)
- Suite of recent RSSB good practice guidance
- Changes in skills development bodies etc

Pre-consultation (16 Nov 2015):

- Summary of ORR intentions to 27 organisations - RIHSAC plus a few more...
- Employers & industry bodies e.g.
 - ATOC, RIA, NSAR, NR, TfL, HRA, CPT, RoSCO rep etc
- Gov't & advisory bodies e.g.
 - DfT, RAIB, RSSB, PACTS, BTP, ORR staff
- Trade unions
 - ASLEF, RMT, TSSA, Amicus, Unite
- “We think...”
 - Bulk OK, so retain, but
 - Weave in non-technical skills development
 - Update refs etc
- Do you agree, any other suggestions?”
- Responses by 5 Jan...

Response to pre-consultation:

- Several RIHSAC members responded, RSSB, RAIB, TfL, ASLEF, Unite, NR (verbal), ORR staff
- All supportive of proposed approach i.e.
- Fit-for-purpose - no need for wholesale reconfiguring :
i.e. “if it ain’t broke don’t fix it”!
- Yes, weave in content on non-technical skills...

Non-Technical Skills (NTS) ?

- Plateau in improvements across many industries
- In GB rail, stubborn themes in incidents e.g. problems from
 - Attention, distraction (e.g. SPADs)
 - Multi-tasking, prioritising, communication (e.g. signallers)
 - Assertiveness (e.g. CoSSes)
- All under the umbrella term “Non-Technical Skills”
- ...“*generic skills which underpin & enhance task performance...
by helping people anticipate, identify & mitigate against errors*”
- We should adopt learning from other industries & countries...

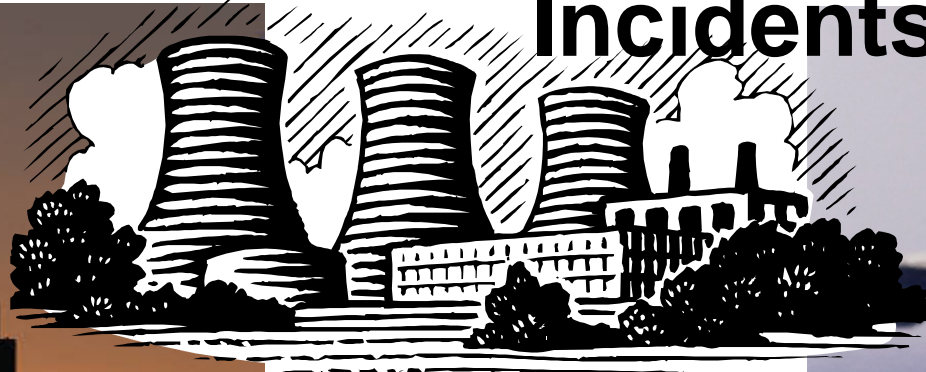
NTS success elsewhere (RSSB)...



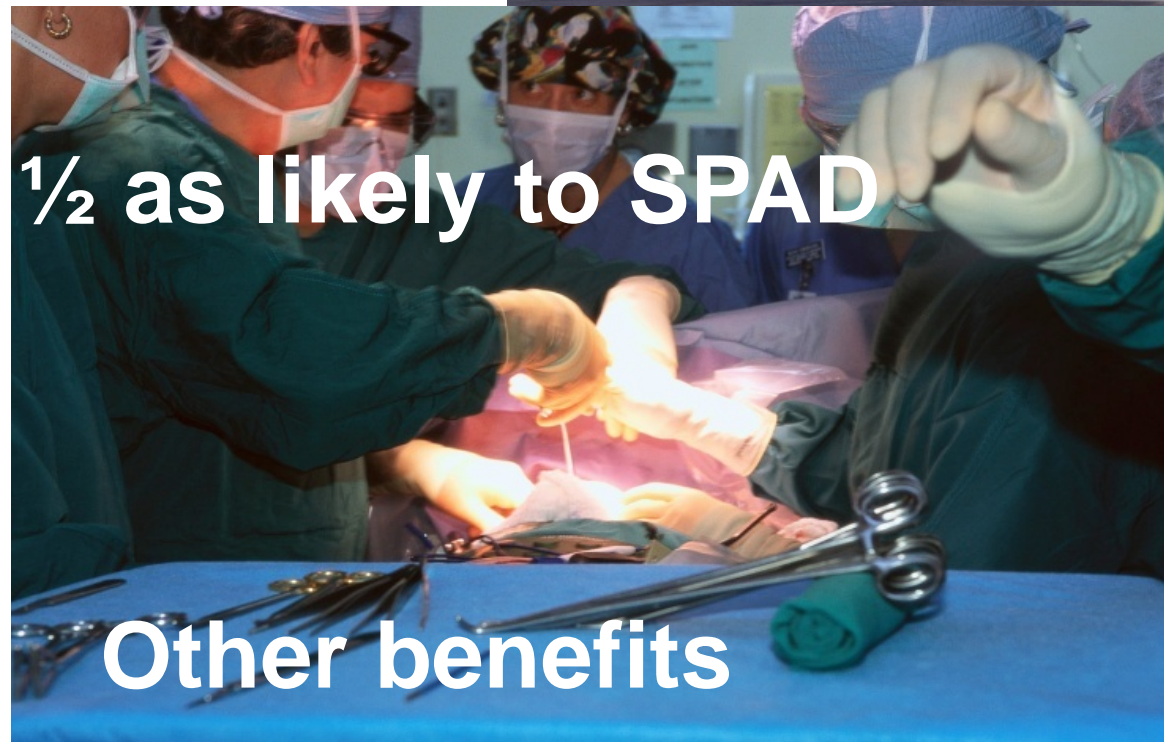
1/3 fewer safety incidents

Reduced costs

46% fewer human-caused incidents



Incidents down 81%



1/2 as likely to SPAD

Other benefits

RSSB non-technical skills work : T869 (2012)

- Excellent suite of RSSB NTS guidance & training materials, industry events
- ORR RGD 2012-03 signposts towards RSSB's NTS guidance

RSSB

Research Programme
Operations and Management
Non-technical skills for rail: A list of skills and behavioural markers for drivers, with guidance notes (2012)

RSSB

Non-technical skills and behavioural markers booklet

Non-technical skills

New training resources and practice on non-technical skills for the rail industry

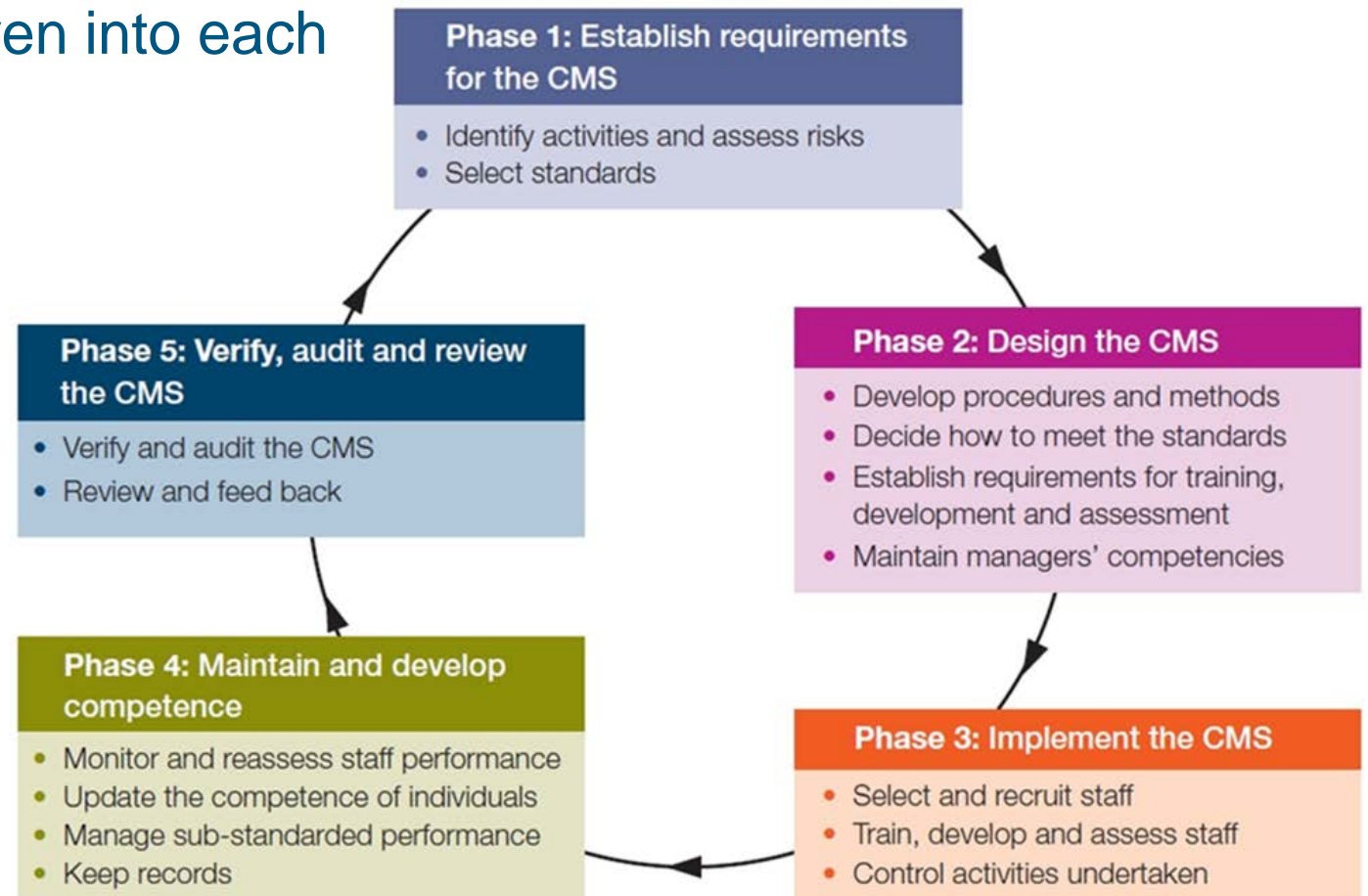
NTS Category	NTS Skill
1 Situational awareness	1.1 Attention to detail 1.2 Overall awareness 1.3 Maintain concentration 1.4 Retain information (during shift) 1.5 Anticipation of risk
2 Conscientiousness	2.1 Systematic & thorough approach 2.2 Checking 2.3 Positive attitude towards rules and procedures
3 Communication	3.1 Listening (people not stimuli) 3.2 Clarity 3.3 Assertiveness 3.4 Sharing information
4 Decision making and action	4.1 Effective decisions 4.2 Timely decisions 4.3 Diagnosing and solving problems
5 Cooperation and working with others	5.1 Considering others' needs 5.2 Supporting others 5.3 Treating others with respect 5.4 Dealing with conflict / aggressive behaviour
6 Workload management	6.1 Multi-tasking and selective attention 6.2 Prioritising 6.3 Calm under pressure
7 Self-management	7.1 Motivation 7.2 Confidence

Railway Guidance Document		RGD-2012-03	
Non-Technical Skills (NTS) for rail staff, and RSSB's NTS guidance			
Date of issue/ last review	Issued 11 th September 2012, updated September 2014	Date of next review	Sep 2016
RGD postholder/owner		Jeremy Mawhood, Central Specialist Inspectors Team	
RGD cleared by		John Gillespie	
RGD type		Policy _____ <input type="checkbox"/> Information _____ <input checked="" type="checkbox"/> Procedure _____ <input type="checkbox"/>	
Target audience		RSD _____ <input checked="" type="checkbox"/> RPP _____ <input checked="" type="checkbox"/> Policy _____ <input checked="" type="checkbox"/> Inspectors _____ <input checked="" type="checkbox"/> Admin _____ <input type="checkbox"/>	
Keywords Non-Technical Skills, Competence Management System			
Summary This RGD informs inspectors about RSSB guidance on Non-Technical Skills (NTS), including a training package which duty holders can adapt to help them integrate NTS training into their Competence Management System.			
Original consultation Claire Dickinson (Human Factors); Keith Shepherd (Operations); Neil Anderson (Safety Management Systems); Iain Ferguson (staff competence rapporteur); Paul Appleton (Network Rail National Team); Gerald Kerr (Rail Operators Team), Richard Thomas (Contractors); William Keag (Legal); Kate Bonsall-Clarke (RSSB).			
Subsequent consultation (reviews only) Claire Dickinson (Human factors); Iain Ferguson (Safety Management Systems); Keith Shepherd (Operations)			

NTS CATEGORY	SKILL
1. Situational awareness	1.1 Attention to detail 1.2 Overall awareness 1.3 Maintain concentration 1.4 Retain information 1.5 Anticipation of risk
2. Conscientiousness	2.1 Systematic and thorough approach 2.2 Checking 2.3 Positive attitude towards rules and procedures
3. Communication	3.1 Listening 3.2 Clarity 3.3 Assertiveness 3.4 Sharing information
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6. Workload management	6.1 Multi-tasking and selective attention 6.2 Prioritising 6.3 Calm under pressure
7. Self-management	7.1 Motivation 7.2 Confidence and initiative 7.3 Maintain and develop skills and knowledge 7.4 Prepared and organised

Revised RSP1 - Integrate NTS development throughout Competence Management System

- a new Appendix on NTS, plus
- NTS content woven into each phase



Revised RSP1 - updates & tweaks:

- Links to recent RSSB guidance e.g.
 - Good Practice Guide on Competence Management
 - skills-fade & maintaining currency
- Link with Risk Management Maturity Model RM3
- Link with Common Safety Method on Risk Assessment & Evaluation (CSM-RA)
- Changes to skills bodies e.g.
 - Replacement of GoSkills, QCA
 - new bodies & roles e.g. NSAR, People1st, Semta etc

Anticipated timeline:

- | | | |
|-----------------------------|------------------------|---|
| ■ Pre-consultation | Nov 2015 – Jan 2016 | ✓ |
| ■ Incorporate new content | Feb 2016 | ✓ |
| ■ RIHSAC
✓ | 8 Feb 2016 | |
| ■ Consultation proper | end Feb – end May 2016 | |
| ■ Finalise revised guidance | June 2016 | |
| ■ Publish on ORR website | July 2016 | |



Thank you!

Questions?



Level crossings update for RIHSAC

John Gillespie

8 February 2016

Purpose

- Set the scene.
- Update RIHSAC members on the **revision of level crossings chapter** (Chapter 4) in ORR's health and safety strategy document
- Update RIHSAC members on ORR's continuing efforts to **secure law reform**

These topics have previously been discussed at RIHSAC in October 2014 (level crossings in general) and February 2015 (law reform)

Level crossing risk – setting the scene

- Network Rail has the safest level crossings and is the safest railway in Europe in terms of the number of bad events happening
- There has been no confirmed fatality (other than suicides) at a level crossing since March 2015, the longest period ever without one
- **BUT we should never be complacent as it only needs one accident with multiple fatalities to make GB the worst in Europe (and there has been an increase in near misses)**



Level crossing risk – setting the scene continued

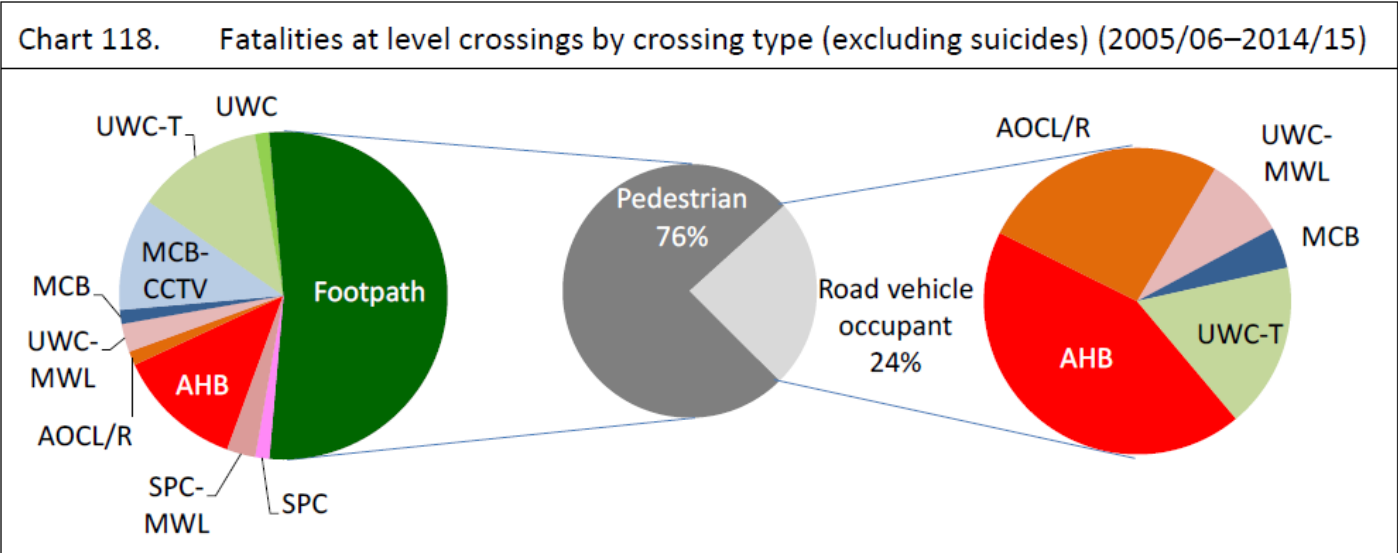
Table 17. Level crossing categories by class and type (June 2015)

Crossing type			Number	
Passive	UWC-T	User-worked crossing with telephone	1670	
	UWC	User-worked crossing	505	
	OC	Open crossing	49	
	FP	Footpath crossing	2106	
Active	Manual	MCG	Manually controlled gate	151
		MCB	Manually controlled barrier	181
		MCB-OD	Manually controlled barrier with obstacle detection	61
		MCB-CCTV	MCB monitored by closed-circuit television	421
	Automatic	AHB	Automatic half-barrier	444
		ABCL	Automatic barrier locally monitored	56
		AOCL-B	Automatic open crossing locally monitored with barrier	63
		AOCL/R	Automatic open crossing locally or remotely monitored	33
		UWC-MWL	User-worked crossing with miniature warning lights	106
		FP-MWL	Footpath crossing with miniature warning lights	128
Total			5974	

Source: Network Rail, June 2015

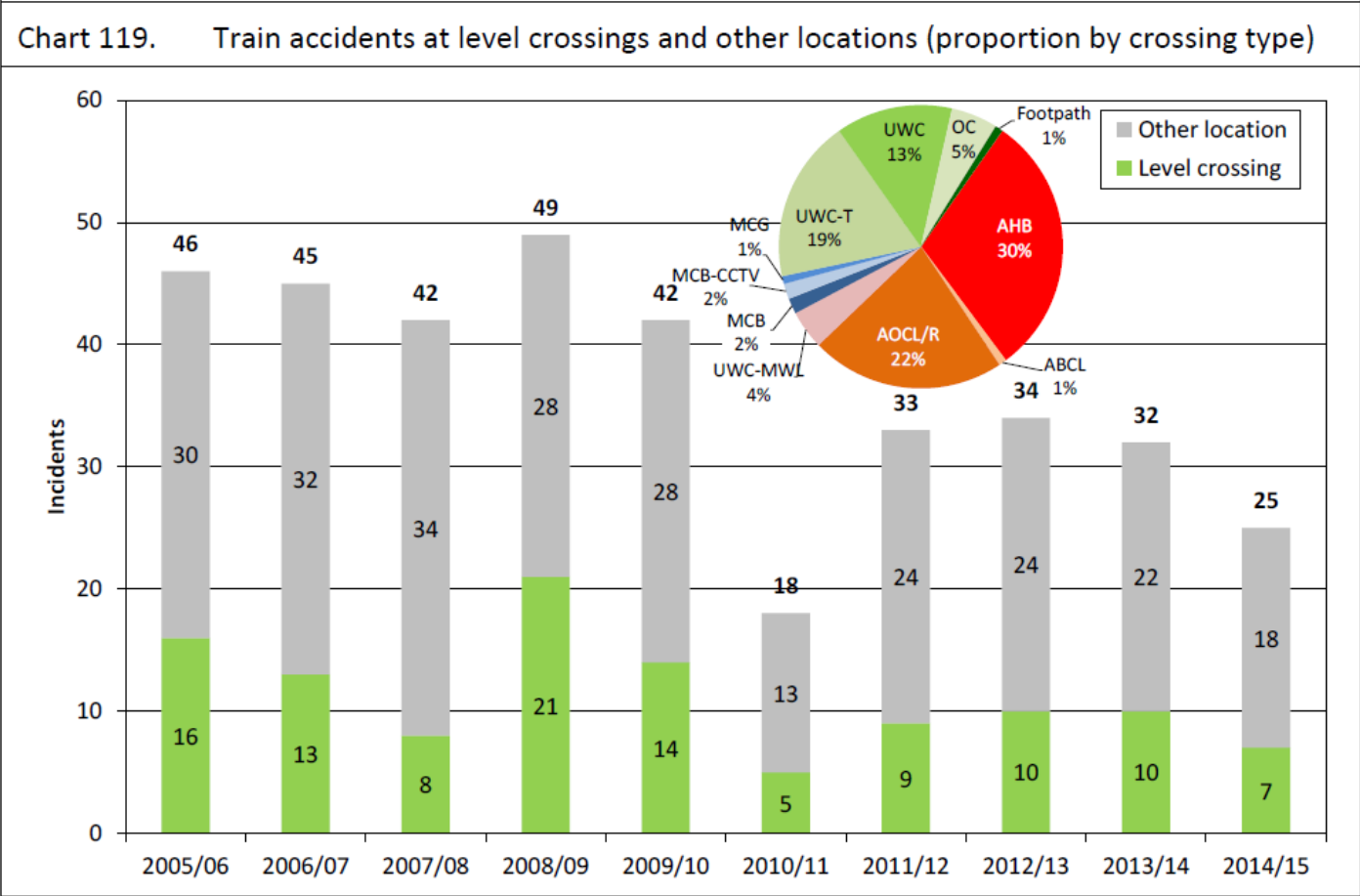
Level crossing risk – setting the scene continued

- The graph below shows the distribution of fatalities by crossing type, excluding suicides.



Level crossing risk – setting the scene continued

- The graph below shows the number of train accidents (as defined by RIDDOR) year-by-year at level crossings compared to anywhere else on running lines.



Level crossing risk – setting the scene

continued

- 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
- ORR's health and safety strategy document, first published in 2012, sets out our approach to **regulating** the health and safety risks created and managed by businesses in the rail industry
- Chapter 4 looks strategically at how we regulate level crossings risk to drive continuous improvement whilst reflecting the “real world”.



Revising chapter 4 of ORR's health and safety strategy

Purpose of review and process

- **Systematic review** of the chapters in its document *Strategy for regulation of health and safety risks* to ensure they:
 - remain fit for purpose; and
 - reflect changes in our perception of risk across the industry based on incident data and our findings from inspections, investigations and audits
- Chapter 4 last reviewed in late 2013 and version 2 published in January 2014. Revision work was undertaken by ORR's cross-office **Level Crossings Co-ordination Group**
- Same approach taken to this revision, using ORR's Health and Safety Regulation Committee and RIHSAC as sounding boards

Main objectives of the revision

- We have revised the chapter in an effort to –
 - Be **forward looking**
 - **Outcome** oriented, with a clearer sense of **priorities**;
 - clear on where **responsibilities** lie;
 - set out our **targeted inspection activity** on particular aspects of risk management:
 - proactive inspection on crossings with whistle boards, in long sections and those with deficient sighting;
 - stress the importance of using **design improvements** and knowledge of **human factors** to reduce LX risk over time;
 - reflect that **Network Rail** is developing its own **level crossings strategy**.

- Policy on a page : Blue box.

Next steps

- Comments welcome from RIHSAC on information presented today and detailed, revised ORR strategy chapter (will be circulated)
- We will then take the final, revised Chapter 4 for ORR internal approval and publish as soon as possible afterwards on our website



Securing law reform

Reminder of background

- ORR has endeavoured to secure level crossing safety law reform since **2008**
- Following a series of workshops held with stakeholders, ORR (in conjunction with DfT) obtained agreement that the **Law Commissions for England and Wales and for Scotland** would tackle level crossings as part of their tenth programme of law reform
- This provided a once in a generation opportunity to modernise and simplify the law, improve co-ordination and co-operation in the management of level crossing risk and simplify the closure of crossings
- The **Law Commissions worked on the project from 2009 to 2013** using a stakeholder advisory group and undertook extensive consultation on their proposals

Position as at Feb 2015 RIHSAC meeting

- Law Commissions had published their detailed report including 86 specific recommendations (Sept 2013)
- Government had provided its final response October 2014 which –
 - **accepted the case** for reform of legislation and procedures governing management of level crossings;
 - gave a **firm commitment to produce an action plan** by the end of 2014 outlining the areas for further consideration/work and how this would be taken forward;
 - provided an “accept”, “modify” or “reject” position against each of the 86 recommendations; and
 - made a **commitment to consult** stakeholders further on some of the detailed proposals
- Action plan was developed by DfT in December 2014 but was not published

Position as at Feb 2016 RIHSAC

- No notable progress against DfT's action plan
- DfT state that they have undertaken some stakeholder engagement but not shared with ORR (any RIHSAC members been approached?)
- ORR continues to press for action through –
 - liaison with the DfT policy team responsible;
 - utilising any contacts ORR or its stakeholders have with the Minister and her team to exert influence (recent note to Special Adviser setting out the need for law reform and action);
 - stressing the “better regulation” aspects of law reform (Govt continue to be under pressure to reduce burdens – level crossing Order process prime candidate in our view);

ORR action continued

- maintaining contact with the Law Commission and Network Rail project leads and senior “Champions” to try to regain some momentum;
- offering resources and practical help to assist DfT in implementation (policy and legal);
- exploring if there are alternative ways to achieve some of the objectives of the original review with particular focus on the Level Crossings Act 1983;
- considering running its own stakeholder workshops to review and refresh the case for reform, help prioritise areas for action and explore potential solutions

How RIHSAC can help

- RIHSAC members can continue to show support and push for action via their respective constituencies and contacts
- If we think it might be worthwhile, would members be willing to participate in ORR led workshops to explore ways forward? (Safety related aspects only: the reform is wider, includes planning law for example).
- Please put forward any suggestions of more things you think ORR could/should be doing.



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Health and Safety by Design

Presentation for RIHSAC

Ian Raxton, RSD

8 February 2016

- What is Safety by Design
- Costs and opportunities
- Why is what we are doing now different?
- Why introduce a new strategic chapter
- What are we doing?
- The Agency Agreement with HSE
- How can we measure success?
- The Future

What is Safety by Design

- Firstly it is shorthand for Health and Safety by Design.
- It is fundamentally the principle that thinking about and then designing out hazards at an early stage in a project is more effective, and more cost effective, than either making changes later on or not at all.

- “Hazards” includes:
 - How things are built and constructed;
 - How they are used by staff and by passengers;
 - How they are maintained;
 - How they are dismantled at the end of their life.

Cost and opportunity

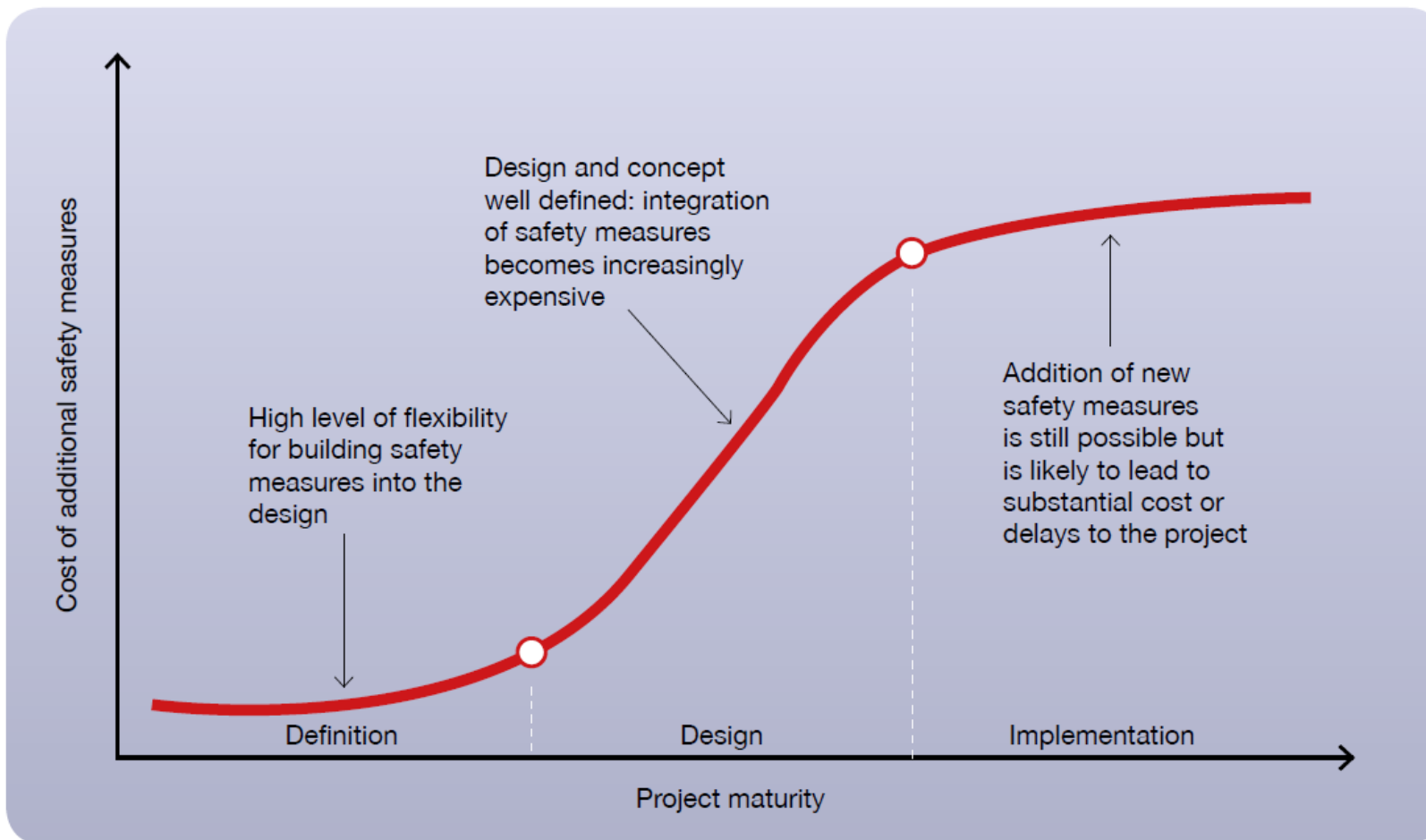


Figure 7: Project maturity and the increasing cost of additional safety measures

- From RSSB's "Taking Safe Decisions" document
<http://www.rssb.co.uk/risk-analysis-and-safety-reporting/risk-analysis/taking-safe-decisions>

Why is what we are doing now different?

- Under the old ROTS system that ROGS replaced, the regulator had to Approve all changes and new works that changed risk on railways and other guided transport systems.
- This essentially had inspectors checking that duty holders were designing and building their systems and infrastructure in line with standards and best practice.
- When ROGS was introduced we made ‘change management’ one of the key parts of the management system.
- When we talk of inspecting ‘safety by design’ now, we are not meaning a return to the intrusive, blanket, approach of ROTS, but rather more focus on checking that change management is working properly and that our key risk priorities are being properly addressed.
- This will be a proactive approach.
- The new approach also supports the clearer duties on designers in the latest version of the Construction Design and Management Regulations.

Why introduce a new Strategic Chapter

- Introducing ROGS and the duties on change management had expected to be enough for a mature industry;
- Experience since 2006 has shown us though that basic infrastructure is not being designed to standards and that we need to put more focus onto this area;
- An example is the work RSD inspectors have done on the electrification projects in the North West and Great Western areas to ensure that the new work complied with UK standards for electrical safety clearances;
- RPP inspectors continue to find basic safety issues when schemes are finally presented for Interoperability Authorisation;
- The new chapter will set out clearly for industry what our expectations are on the topic so that they understand what we will expect to see as representing good practice – and what complying with the law means for designers.

What are we doing?

- **New Strategic Risk Priority chapter**
This will set out clearly ORR's position and our expectations of industry;
- **Reviewing and re-publishing the key elements of the old Railway Safety Principles and Guidance to set out our minimum expectations of standards of new work;**
- **Giving clearer guidance to inspectors on what to look for as representing good practice in projects;**
- **To engage with major schemes, such as HS2, to promote the concept of Safety by Design and examine key risk areas to see that they are being dealt with properly;**
- **Entering into a new agreement with HSE to ensure that ORR has enforcement responsibility over the aspects of design that relate to the operation of railways.**

The Agency Agreement with HSE

- As the current Enforcing Authority regulations stand the responsibility for a railway only passes to ORR once there is 'operation', and even for existing operations if the work is sufficiently segregated it is under HSE enforcement.
- HSE are very interested in design for construction but less so in the design of railways projects to operate safely.
- This leaves a potential gap in enforcement, particular for new projects like HS2 and Crossrail where duty-holders do not have an existing relationship with ORR there is no existing 'duty holder'
- Both ORR and HSE agree that it is appropriate for ORR to be able to work with railways during the planning, design and development of schemes to look at the health and safety of operations and maintenance.
- The agreement has been drafted to leave construction issues with HSE and only operation and maintenance aspects passing to ORR.
- The agreement is a formal mechanism for delegating functions between the regulators and will be kept under review.

How can we measure success?

- This is something that we will only see the effect of in the long term in helping to push down on the numbers of RIDDOR incidents.
- In the short term we can collect data from inspectors when they feel they have intervened to provoke more consideration of good design.
- While we can expect there to be 'enforcement' in the widest sense of the term, this is likely to be overwhelmingly be in the form of verbal and written advice.
- We will expect to get a qualitative improvement in the schemes we receive submissions for under various permissioning regimes.
- Are there other things that you think we should focus on as measures?

So, what do we want for the future ...

- We want to challenge the industry to make a change in the way they develop projects in practice.
- We want the industry to seize opportunities to design out problems, to set standards that raise expectations and not accept the status quo.
- We want those who plan and design all aspects of railways to start to change the way they think.

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