# Developing safety culture in Network Rail

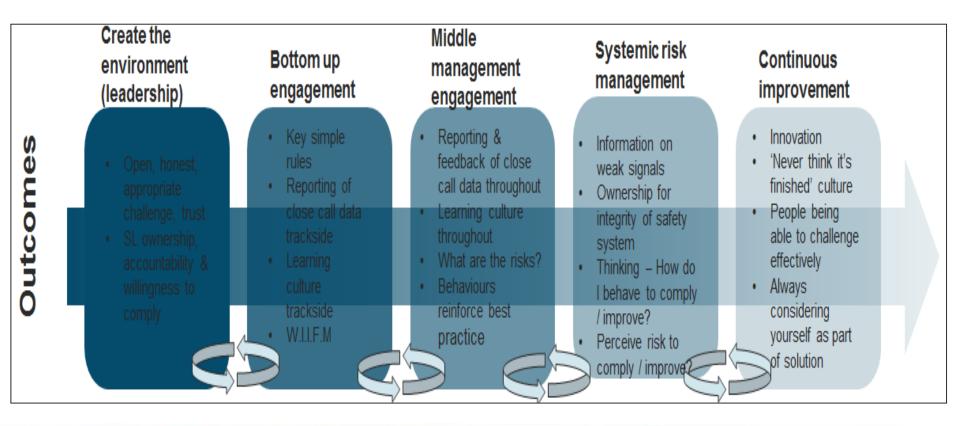
Lynn Chamberlain-Clark

Principal health and Safety Change Specialist, Network Rail, UK

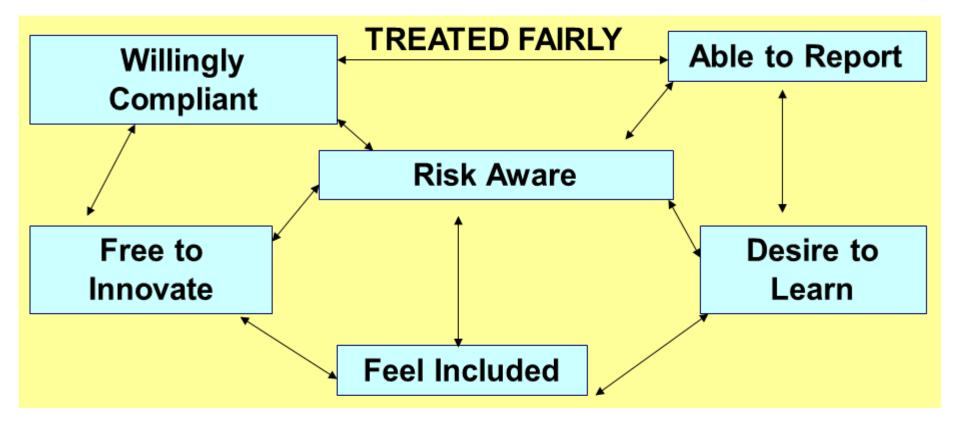
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## The solution- designing a safety culture in NR



### The solution: Building the skills



NetworkRai

# Creating the environment-vision and Leadership



11-Jul-17 / 4

## Creating the environment-measuring

Guitural Thomos	1 Complaining Why should we do anything?	2 Reacting We do something because others tell us to	3 Directing We need to get exployees to Astron the rules	4 Devolving Anthésiais bie responsibility	5 Involving divergone is involved in waterplace
Compliant Culture	Any rules are a hindrance to be nanited or secretly ignored Blame outure; reporting safety issues creates problems; hat wouldn't work here – E's the railouty	Reactive, technical or procedural solution complance with reductions Got to do it convegutator says so; we don't one cur own satisfy age to	Simple rules, programmes & communications that all undestrand Develop-competence & set own strategy beyond compliance	Safety rules & behavioural change gain widespread acceptance & permotion Staff empowered to make risk based decisions to comply with the rules	Branvere is committed first & foremost, to keeping the LSRs, encoursiging and challenging fellow wolkers to do the same
Reporting Culture	Unspoken tigstement at all levels of business that accidents & incidents are kept secret Nobody listers to us; them ve us mentality	Datality accidents and incidents are only revealed or registed when demanded or enterne cases when the accident of the second second when the second	Improved systems for reposing are in place but still not eidely used – employees cynical about fairness Some start of an undentanding of the rules – making links between outure and safety	Increased reporting of Close Calls thro promotion locally by managers who ensure anonymity & feedback Statingto see and understand how my actions & behavious affect others	We actively identify & report hazards, uniate conditions & acts, olose-calls & ausets of concern, without fear of retribution
Fair Culture	Accuration 6 punishment is rife. Employees are in fear of being Yound out with automatic biame & diamizzat the result Don't feel valued. 'Ye not fair' nothing in it for me. A fear and biame outure	ore still e	Investigators / designated persons am re-trained in fair couters approaches, promiser comme about shift in outers can estimate	ing or oreans area	Brenvere is trusted to work mappinsibly within clear, simple boundaries, where the consequences of being uncafe are clear diffee of automatic blame
Risk Aware Culture	Safety is not seen as a key baseves risk. Convertioned baseves risk. Convertioned why bother - nothing changes; serve always done is this way, our way weak for us; someone dards problem	Senior may Where in the line half to more to Safey mesuages are ene of many warrhigs Rely on the nelesso cover back Break rules to getthe job done	We are NOV Frontine staff given permission to speak up but productivity is refit effectively the top priority have engagement and inc.	Conversitions about this is conversitions about this levels of daily work the at all levels of the annual thereid to 8 used Onnamic Risk Assessments occur; people question and ohallenge in active dialogue	We are arean of the take we fare, encouraging open encouraging types methoding these where looking after coleagues is part of great tearmede.
Learning Culture	Accidents are seen as unanvietable so few less and learns I have nothing more to learn. Complement - got away with unsafe practices in part: judge others after safety incidents!	Incident investigation is incident -speakin so testors not transferred. Responsibility for my learning sits elsewhere - any failure is concore else's fault. I rely on expents to tell me what to do	Reports 6 recommendations participated after incidents but only serve to add damend rules tots of rules and targeted and any regrammes enable wile based earning and some sharing of earning	Seniormanagers buyin to outure change - unicarring and questioning of an unpetione More proteine, share 6 embed new learning in processes coaching conversitions at all levels	We provide and seek feedback in constructive conversations about safety, learning from mistakes dimaking changes to our business to stop repeat incidents
Inclusive Culture	Responsibility for HdS lies with them,". Frontline staff have their own informal atf sty agreements "Theory man for himself", Lack of understanding of risks. In Childro child or participation by of child restancing and	Managers at all levels are told to address salety, esp, after major incidents it go through a 'box- ticking' exercise Management vs staff, A tell' outure	Principally a tel' culture with opportunity to participate in surveys. Comma campaign encourages involvement Safety groups / committees develop to include outure theme	Frontline staffinor, involved in planning safety into work; managament & T.U. reps work together. Less hierarchical;more 2 way dialogue / process	Breryone plays their role in delivering a safe environment, contributing ideas which are bold into our safety vision dipractice

Individuals	Teams	Managers			
KPI's / Scorecard					
Safety	Performance	Cost			

Man	LTURE CHANGE SCORECARD
Bafety Culture Inputs	Business Impact Outcomes
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We need to get empk follow the rule	Devolving Culture Individuals false responsibility



### Behavioural Narrative

Balanced scorecard

Leading KPIs

### Bottom-up engagement- talking about safety

SEEN A CLOSE CALL?

Personal Party of the last

## Bottom up engagement- willing compliance

Never use a hand-held or hands-free

Always obey the speed limit and

phone, or programme any other

mobile device, while driving.

wear a seat belt.



Action relating to manager of individual/s

Coaching conversation on how to manage Rule-breaking. If this type of

iolation has occurred before, a formal discussion must be held to explain

the implications of condoning a violation or not taking action, and to set



Always be sure the required plans and permits are in place, before you start a job or go on or near the line.



Always use equipment that is fit for its intended purpose.



Never undertake any job unless you have been trained and assessed as competent.



Never work or drive while under the influence of druas or alcohol.



diffe peor

system

Routine error -

personal history

Poor iudgement

Slips and

lapses

erent ble	It has become the accepted way of working.
ake	The mistake was the result of inadequate information,

training or support. Workload and equipment factors may also have contributed to this error.

It's not the first time that this type of error has been made by this person. Other people in similar situations do not

Contravention The person committing the violation thought it was better for the company to do it that way or considered the job couldn't be done if the procedures were followed. The violation was committed to improve performance or to please the supervisor.



Always use a safety harness when

Never enter the agreed exclusion

zone, unless directed to by the

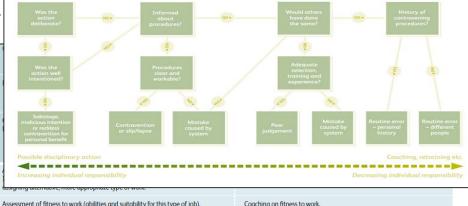
working at height, unless other

protection is in place.

Working with moving equipment

person in charge.

Working at height



The person demonstrates poor risk awareness and/or Assessment of fitness to work (abilities and suitability for this type of job). Coaching on fitness to work. understanding of the impact their actions have. If appropriate, competence development and coaching. If not, consider assigning alternative, more appropriate type of work. Actions did not proceed as planned, e.g. something was Coaching conversation on how to spot, report and prevent errors. Coaching conversation on how to manage errors. Identify alternative work methods that make better use of reminders, checklists and other job aids. done the wrong way, done twice or a step was forgotten.

### Simplifying rules -10 Life saving rules

### A fair process for any breaches

Working responsibly Driving



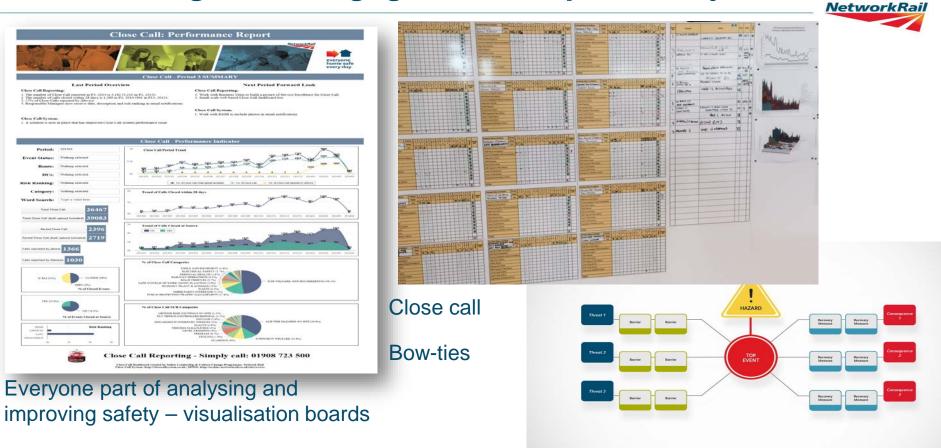


make this error.



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caused by
```

### Middle management engagement- responsibility



## Middle managers- knowing their staff



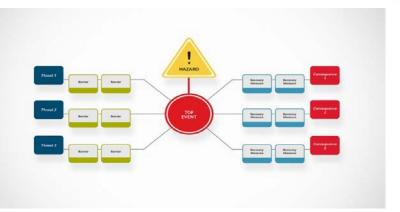
## **Safety hour**

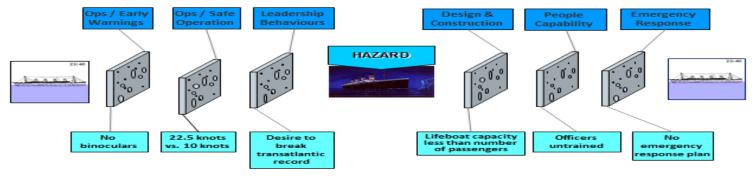


## Systemic risk- the early barriers

All stages of the process included in bow-ties and the people who work in these stages

- Bespoke interventions help office based staff understand how their decision affect safety
- Front-line sessions as part of competencies and awareness



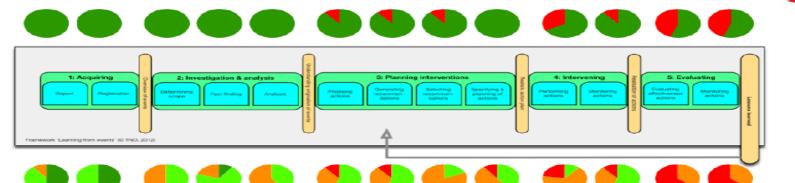


Total Passengers: 2295 Lives Saved: 795

#### Lifeboat Capacity: 1600 Lives Lost: 1500



## Systemic risk- Learning from incidents



everyone home safe

every day

#### Safety Bulletin

A serious incident has taken place

#### Smouldering head torch

Issued to:	All Network Rail line managers, safety professionals and Achilles registered contractors
Ref	NRB 17/02
Date of issue:	23/02/2017
Location:	IMDM Motherwell area, Scotland Route
Contact.	Simon Constable, Head of Route Safety, Health & Environment, Scotland



#### Safety Advice

Action required following a serious incident

#### every day

everyone

home safe

Immediate quarantine of Manitou 160 ATJ Plus and 160 ATJ Plus RC based MEWPs

Issued to: All Network Rall line managere, safety professionals and RISQS registered contractors

NRA 17/01 Update 1

Date of 08/03/2017 /ssue:

Ref

- Location: Cowlairs, Scotland
- Contact: Olufemi Okeya, Principle Engineer

#### Overview

At approximately 01:35 on 3 March 2017 a Rail Product ART 17 TH MEWP accessed at Cowlairs Road Rail Access Point to carry out Overhead Line Equipment Installations as part of the Edinburgh to Glasgow Improvement Programme (EGIP).

- 7 a Those specifically identified are:
  - Rall Products UK/Manitou ART17T
  - Rall Products UK/Manitou
  - ART17T(H)
  - Neotec SkyRaller 400RR

### Review of impact of learning

### **Quicker information**

# Open questions- create ownership of behavioural change

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# Continuous improvement – double loop learning

### Learning:

- includes all staff
- is emotive

Route behavioural themes Vs. Sample attendees Route Sample attendees 31% 20% 20% 14% 13% 8% #shared #work conditions #vigilant #personal #cautiousness #compliant #well-being #relationships emotions responsibility 37% 35% Route process themes Vs. Sample attendees 30% 28% 22% 12% 10% 4% 4% 2% 296 096 #structure # sy ste m #COSS/lookout #olanning #Line blockase Freduced/remove.red #bestoractice Forocedure volvement in planni zone planning proce dure

• Leads to personal commitments that are reviewed

#### Exploring the barriers





#### Vehicles

Fatique

Use of in car technology – fatigue camera's etc.
What safety specification do we use when selecting vehicles?
Comfort of users – Air conditioning, adjustable seats
Vehicle familiarisation can be an issue when using hire cars and changing between vehicles
Competence / experience of driving larger vehicles such as transit vans



Traveling distances required especially night shifts
Consider the use of designated drivers
Positioning of staff / depots v's work locations
12 hour shifts can increase fatigue, particularly night shifts
Vacancy gap resulting in overtime and increased fatigue



Journeys

People are required to travel long distances to and from work sites
The use of journey planning should be considered
Could we use technology to reduce the number of journeys undertaken such as video conferencing?
Meeting locations should take into consideration travel distances for attendee's

Network Rail should set driving time limits and break guidelines for drivers

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## **Continuous improvement-ownership**





Creating and understanding of need, expectations and outcomes for Behavioural change

Improving based on learning and feedback

Number→Closure →Feedback

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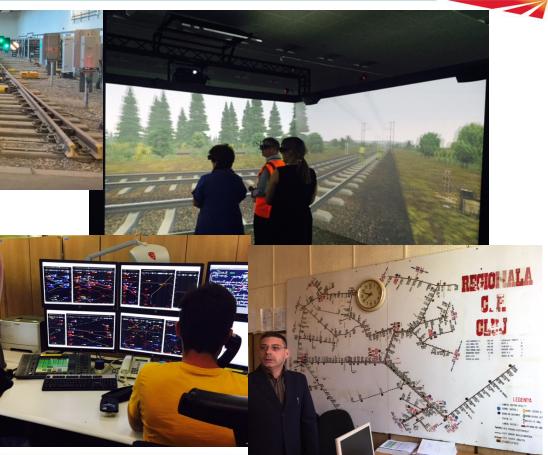
### European Twinning



Challenges of national and organisational safety culture

KPIs – predictive learning seems more reliable in measuring safety culture

Ways of working with NSAs affects safety focus- how do they improve safety culture?



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