



OFFICE OF RAIL REGULATION

The Geography & Geology of the Rail Industry

Claire Dickinson

17th October 2014

Train Operating Companies (TOCS) & Entities In Charge of Maintenance



Infrastructure – Stations and Track



Electrification - South- West and North West



Metro's, Transport for London/LU, trams, heritage



Organisations



Department
for Transport



Railway Industry Association

ROSCO Train
Leasing
Companies

TRADE UNIONS –
Aslef, RMT, TSSA,
Unite



OFFICE OF RAIL REGULATION

ORR is the combined independent regulator for the rail industry

Economic regulator for railway infrastructure (Network Rail and HS 1)

Health and safety regulator for the rail industry as a whole – including main line, metro, tramways and heritage railways across Britain

The industry's consumer and competition authority – including complaints handling policies, disabled people's protection policies and ticketing and fares codes of practice

ORR also has a role in providing independent advice to the government and to the industry about the future of the railways, and we work with regulatory authorities in other sectors in the UK and rail authorities across the world to develop best-practice standards in railway regulation.



ORR purpose

Our purpose

- As the health and safety regulator for Britain's railways, the law requires us to make sure railways companies have arrangements in place to **protect the health, safety and welfare of workers, and protect others (including passengers) against health or safety risks** created by the railways
- Make sure the legal framework for railway safety is developed and maintained

How we do this

- We have inspectors and other employees in ORR dedicated to this purpose (currently about 110 people)
- The law gives us enforcement powers
- We can recommend legislation



How we do it

- Examine duty holders' risk management arrangements and grant permission to operate;
- Audit and inspect, aspects of their safety-management systems;
- Investigate incidents and complaints (to identify failures and ensure lessons are learnt);
- Assess the effectiveness of duty holders' safety-management system and management abilities and attitude [excellence in health and safety and Railway Management Maturity Model (RM3) <http://www.rail-reg.gov.uk/server/show/nav.1098>];
- Use our powers to bring about improvement; and
- Prioritise and target our resources efficiently, particularly at train accident (catastrophic) and serious risks to individual workers and passengers, but we don't examine all risks.



ORR : Policy and technical link to HSE

- Health & Safety at Work, etc Act, 1974
- Management of Health & Safety at Work Regulations, 2003
- Railway and Other Guided Transport Systems (Safety) Regulations, 2011 (amended)
 - SMS, Safety Verification, Safety Certificate & Authorisation, Risk Assessment, Annual Safety Reports, Co-operation, Safety Critical Work, Entities in Charge of Maintenance
 - Reg 22 Transport operators to co-operate with one another
 - Part 4 on safety critical work : Reg 24 Competence & Fitness, Reg 25 Fatigue

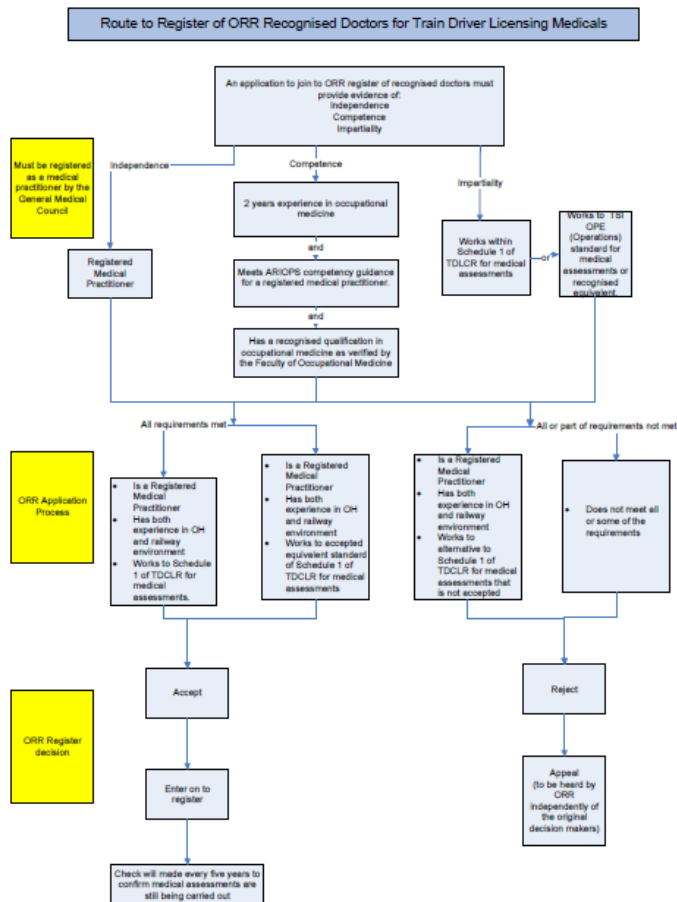


Further Legal Instruments

- The Rail Vehicle Accessibility (Non-Interoperable Rail System) Regulations 2010 (RVAR 2010) set out the accessibility standards to which new non-mainline (and older rail vehicles as and when they are refurbished) must comply.
- The Railways (Interoperability) Regulations 2011 (RIR) came into force on 16 January 2012 and implement the EC Directive 2008/57/EC on the interoperability of the UK rail system. They apply to new, major, upgraded or renewed infrastructure and rolling stock. Applicants have to follow a framework and seek an authorisation from ORR, to place the infrastructure or rolling stock into service.
- Transport and Works Act 1992 – exercise due diligence to ensure that their employees do not carry out safety critical work whilst under the influence of drugs or alcohol



Train Driver Licenses & Certificates Regulations, 2010




- Reg 8 – Doctors to be on the published register
- www.orr.gov.uk/what-and-how-we-regulate/licensing/train-driving-licences-and-certificates
- Applications are made to: ORR, Railway Safety Directorate Administration Team
Office of Rail Regulation
One Kemble Street
London
WC2B 4AN



<http://orr.gov.uk/health>

PROTECT – NOT PROTECTIVELY MARKED*

		Railway Guidance Document		RGD-2014-**	
DIESEL ENGINE EXHAUST EMISSIONS (DEEE) IN THE RAILWAY SECTOR					
Date of issue/ last review	October 2014		Date of next review	October 2016	
RGD postholder/owner			Sharon Mawhood, CSI team		
RGD cleared by			Claire Dickinson, CSI Team John Gillespie, Central Regulatory Division		
RGD type			Policy _____ <input type="checkbox"/> Information _____ <input checked="" type="checkbox"/> Procedure _____ <input type="checkbox"/>		
Target audience			Policy _____ <input type="checkbox"/> Inspectors _____ <input checked="" type="checkbox"/> Admin _____ <input type="checkbox"/>		
RSD _____ <input checked="" type="checkbox"/> RPP _____ <input checked="" type="checkbox"/>					
Keywords DEEE EXHAUST EMISSIONS DIESEL ENGINE					
Summary This RGD summarises the current evidence base on health risks associated with exposure to diesel engine exhaust emissions (DEEE) and advises inspectors about action to take in securing compliance with the Control of Substances Hazardous to Health Regulations 2002 (COSHH) (as amended) in respect of DEEE in the railway operating environment.					
Original consultation HSE - policy, occupational hygiene, and medical specialists Rail Operators teams - Gerald Kerr; Don Wilson RPP rail vehicles team - Phil Sharpe Network Rail Division - Paul Appleton and Jenny Lopez Rail Policy - Dawn Russell					
Subsequent consultation (reviews only)					

- *To be published shortly*
- Inspectors guidance:
 - DEEE
 - Silica
- Strategic position papers on:
 - Stress management
 - HAVS
 - Musculoskeletal disorders
 - Asbestos



➤ Chapter 11 : headcount, absence and absence costs

Key messages in this chapter (continued)

- We are looking for Network Rail to improve its occupational health management and in doing so achieve £20m in cost savings in the final year of CP5, with a total saving of £55m in CP5.
- We expect Network Rail to improve its health and safety performance in CP5 and we will monitor its implementation of the strategies on safety and wellbeing and health and wellness.



Office of Rail Regulation (ORR)

- enforces compliance with Health and Safety at Work Act and subordinate regulations for Britain's railways by:
 - setting railway-specific policy;
 - producing guidance;
 - inspection, audit and investigation or risk controls;
 - driving improvement through advice and formal enforcement;
 - ensuring research is carried out.
- assures that duty holders comply with processes which deliver system safety for the mainline railway; and
- acts as Britain's National Safety Authority in Europe.

Railway industry duty holders

- duty to eliminate risk by:
 - conducting risk assessments;
 - implementing control measures within a Safety Management System (SMS) through setting safe systems of work, instruction, training, supervision, monitoring and review of the effectiveness of their controls; and
 - co-operating with other operators and parties.
- licence condition requires railway group members (but only on the mainline) to join RSSB. Others, such as suppliers, can join voluntarily.



Rail Safety and Standards Board (RSSB)

- scope is the mainline railway;
- manages railway group standards for interfaces (operational/performance benefits as well as safety);
- supports the industry in securing health and safety by:
 - data-gathering, analysis and risk modelling;
 - running the cross-industry research, development and innovation programme; and
 - encouraging and facilitating cooperation; and providing technical expertise.

Rail Accident Investigation Branch (RAIB)

- independent investigation body for railway accidents/incidents;
- has no enforcement powers;
- produces reports with recommendations about preventing a reoccurrence;
- can produce urgent safety advice; and
- does not apportion blame or liability.



ATOC – trade association

Advice and information for wheelchair users at stations and on trains

Introduction

This booklet is designed to help wheelchair users meet their needs whilst travelling. This includes information on what to do pre, during and post travelling and important points of contact to take note of. This includes how to get in touch with the train operating company beforehand to prepare for your journey, important information to take note of during your journey and what to do when you arrive at your final destination.

It should also be noted that these guidance notes do not deal with mobility scooters. Research on mobility scooters is being planned.

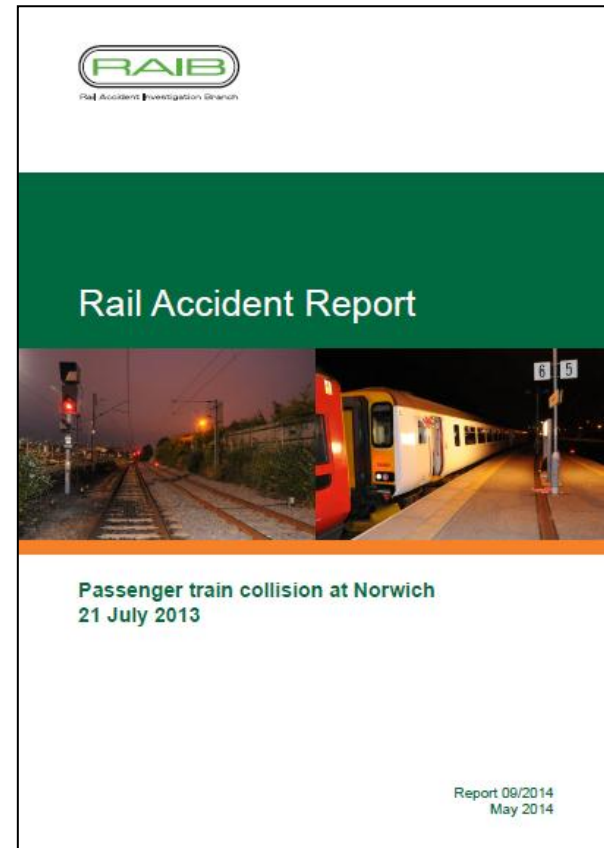


- ATOC HEROH & ATOC Safety Forum
- Set up in 1993, ATOC brings together all train companies to preserve and enhance the benefits for passengers of Britain's national rail network, which jointly we do by providing these services:
 - a central clearing house for the train operators, allowing passengers to buy tickets to travel on any part of the rail network, from any station, through the [Rail Settlement Plan](#)
 - a customer service operation, [National Rail Enquiries](#), giving passengers up-to-the-minute information on train times, fares, reservations and service disruption across the country
 - developing [commercial activities](#), such as a range of discounted and promotional railcards,
 - an [operations, engineering and major projects team](#), that supports Scheme members in delivering a safe, punctual and economic railway
 - From 2011, the [Rail Delivery Group](#) has been responsible for leadership, policy formulation and communications on behalf of the whole rail industry

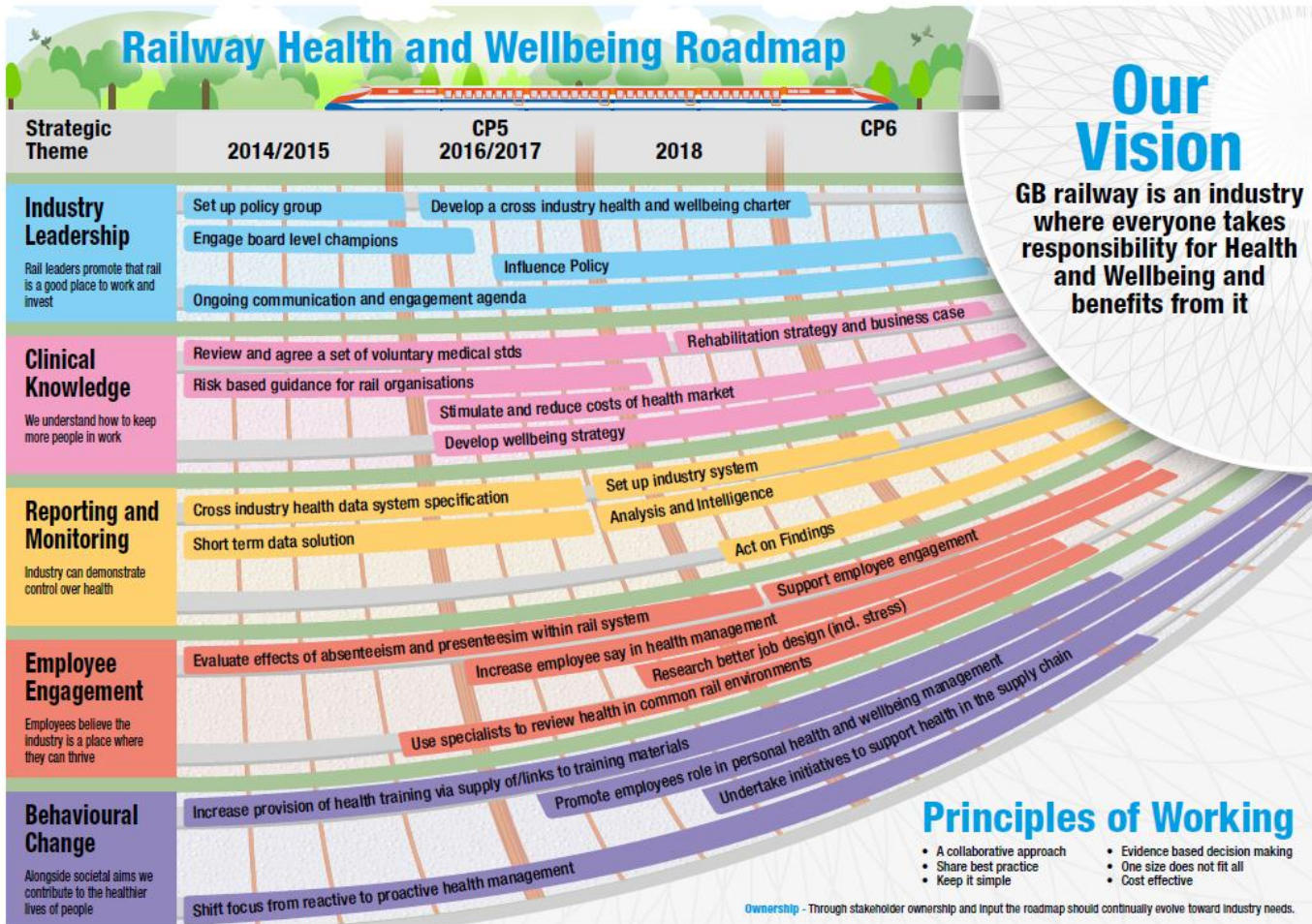


RAIB – railway investigation body

- RAIB – Norwich Station incident due to micro-sleep or lack of concentration
 - Short term lack of sleep
 - Prescribed medication
 - Information provided to the railway doctor
- RAIB the independent railway accident investigation organisation.
 - Industry learning on safety, not establishing liability or blame, no enforcement role
 - Signatory to Work Related Deaths Protocol with BTP, ORR, HSE etc
 - Established by the Railway Safety Directive 2004/49/EC



RSSB Industry Roadmap



RSSB Railway Group Standards

Issue Industry Standards – 3451 issue 4 & 3452 issue 1

<p>Document comes into force as of 06/09/2014 Part supersedes GORT3451 Iss 3 and GORC3551 Iss 4 as of 06/09/2014</p> <p>Railway Group Standard GORT3461 Issue 4 Date June 2014</p> <p>Train Drivers – Suitability and Medical Fitness Requirements</p> <p>Synopsis This document mandates the medical fitness requirements for train drivers.</p> <p>Copyright in the Railway Group Standards is owned by Rail Safety and Standards Board Limited. All rights are hereby reserved. No Railway Group Standard in whole or in part may be reproduced, stored in a retrieval system, or transmitted, in any form or means, without the prior written permission of Rail Safety and Standards Board Limited, or as expressly permitted by law.</p> <p>RSSB Members are granted copyright licence in accordance with the Constitution Agreement relating to Rail Safety and Standards Board Limited.</p> <p>In circumstances where Rail Safety and Standards Board Limited has granted a particular person or organisation permission to copy material from Railway Group Standards, Rail Safety and Standards Board Limited accepts no responsibility for, nor any liability in connection with, the use of such extracts, or any claims arising therefrom. This disclaimer applies to all forms of media in which extracts from Railway Group Standards may be reproduced.</p> <p>Published by: RSSB Block 2 Angel Square 1 Torrington Street London EC2V 1NY</p> <p>© Copyright 2014 Rail Safety and Standards Board Limited</p>	<p>Document comes into force as of 06/09/2014 Part supersedes GORT3451 Iss 3 and GORC3551 Iss 4 as of 06/09/2014</p> <p>Railway Group Standard GORT3462 Issue One Date June 2014</p> <p>Train Movement - Medical Fitness Requirements</p> <p>Synopsis This document mandates the medical fitness requirements for persons whose duties include train dispatch, shunting or travelling as a competent person with a train driver.</p> <p>Copyright in the Railway Group Standards is owned by Rail Safety and Standards Board Limited. All rights are hereby reserved. No Railway Group Standard in whole or in part may be reproduced, stored in a retrieval system, or transmitted, in any form or means, without the prior written permission of Rail Safety and Standards Board Limited, or as expressly permitted by law.</p> <p>RSSB Members are granted copyright licence in accordance with the Constitution Agreement relating to Rail Safety and Standards Board Limited.</p> <p>In circumstances where Rail Safety and Standards Board Limited has granted a particular person or organisation permission to copy material from Railway Group Standards, Rail Safety and Standards Board Limited accepts no responsibility for, nor any liability in connection with, the use of such extracts, or any claims arising therefrom. This disclaimer applies to all forms of media in which extracts from Railway Group Standards may be reproduced.</p> <p>Published by: RSSB Block 2 Angel Square 1 Torrington Street London EC2V 1NY</p> <p>© Copyright 2014 Rail Safety and Standards Board Limited</p>
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RSSB: CIRAS Risks Catastrophic, Health & Safety

mantra "health like safety"

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CIRAS

CONFIDENTIAL REPORTING FOR SAFETY

A safety net for industry www.ciras.org.uk

Human Attention Errors

CIRAS has an active interest in Human Factors. In our May/June newsletter, we looked at mobile technology and its use in the workplace. The way that we behave as individuals and the reasons for this can impact all levels of our daily life. Having an understanding of this makes it clearer why some CIRAS reports are made. The following feature looks at 'Human Attention Errors' and explains how some mistakes occur and what the consequences could be in a safety critical environment.



IN THIS ISSUE

- Human Attention Errors pages 1-2
- Train Operation Reports pages 4,5
- Infrastructure Reports page 6
- Platform and Station Reports page 7
- Freight Reports pages 8-9
- London Underground Reports page 10

To give us further insight, we have spoken to Colin Thompson who is now responsible for Refranchising East Coast Mainline Company Ltd. Colleagues he worked with in the aftermath of the United States Chatworth accident in 2008 went on to form the Atticus Consultant Group, which specialises in "attention-related errors."

John has introduced this group to CIRAS and recently Paul Russell, Head of CIRAS, and John Abbott, National Programmes Director at RSSB, were given a very interesting presentation and talk on the subject.

How are Human Attention Errors caused and how can they be reduced?

We all make mistakes, sometimes many throughout our day. Fortunately, the vast majority of these are not safety critical and have minor consequences. Why do people make errors that, in some contexts, can lead to catastrophic accidents?

We're only human and our mental resources are limited so we can't concentrate on everything at once. Psychological research refers to these as our 'attentional resources'. If a sufficient amount of these resources are not allocated to the task at hand, such as monitoring for signals or speed, our performance can be negatively impacted.

These sorts of mistakes are often humorous and at worst irritating, but in railway and public transport operations, seemingly trivial mistakes can have catastrophic consequences. Passing a signal at danger or a momentary distraction can lead to major rule violations and potentially tragic accidents.

Telephone without Banksmen

There are concerns that telehandlers are operated without Banksmen on the line of the telehandler, it is believed that a Banksmen should assist the Operator by looking out for any dangers, such as a rail being by or proximity to overhead lines, that

the Operator may not necessarily see.

Consider stress for Skyblues

- Provide toolkits or lifting equipment whenever lifting
- Ensure there are staff on site who possess the correct tickets to use toolkits or lifting equipment
- Clarify whether telehandlers require a Banksmen
- Investigate whether it would be possible to provide Banksmen when telehandlers are in operation

Manual handling: Following the report, Carillon Rail

The installation process now involves placing the new trough sections in advance of pre-placed locations. Mechanical means

ACTIONS TAKEN BY SKYBLUE

- Lighter sites are now being used
- Additional Banksmen have been employed

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INFRASTRUCTURE REPORTS

Concerns about manual handling and driving telehandlers

Concerns have been raised about perceived unsafe working practices carried out on sites between Doncaster and Peterborough, which are

THE CONCERNS

Manual handling of troughing

According to the employee, staff are having to manually lift troughing weighing approximately 50kg, into that bogie and lifting equipment should be made available whenever the troughing is lifted. It is believed that there are not enough bogies or that bogies are occasionally made available, so staff on site do not possess the correct tickets to use them. It is felt that manually lifting troughing of this weight could cause injury to staff.

Telehandlers without Banksmen

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RESPONSE FROM SKYBLUE

Skyblues have discussed these issues with our client, Carillon Rail, who is responsible for the control of safety on these sites and they have confirmed the following:

Manual handling: Following the report, Carillon Rail

has now used to reduce the element of manual lifting. A two person, non-stone handled lift and troughing is also used selected to ensure the lifting activity is rotated amongst the teams and individuals have now been given additional health assessment along with specific manual handling training using this equipment to minimise any risk of injury.

Control of vehicles: Carillon Rail confirmed that a Banksmen is required to control the movement of telehandlers and all other the report they identified a shortfall in the availability of competent Banksmen, and an additional 13 people have now been trained at Doncaster and Waltham through compounds.

The installation process now involves placing the new trough sections in advance of pre-placed locations. Mechanical means

suspended trough installation for approximately three weeks in order to review the activity, particularly with regards to manual handling.

Carillon Rail consulted with the trough installation team to get their practical view, investigated the use and condition of the manufacturer regarding lighter units. A review of site the various mechanical aids such as secure litters or tracks introduced other safety hazards. The solution chosen was to purchase lighter units, which are now 50kg as opposed to the 54kg weight of the original units.

ACTIONS TAKEN BY SKYBLUE

- Lighter sites are now being used
- Additional Banksmen have been employed

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CIRAS

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Workforce health and wellbeing

Working in a healthy environment is important for everyone, regardless of what industry you're in. Being well rested, eating the right foods and having a balance between your work and home life can all help contribute towards a healthier lifestyle and thriving workplace. At CIRAS, we wanted to know what you think makes a healthy working environment so we asked for some input to this.

Thomas Ward, a member of Station Staff for First TransPennine Express at Thornaby station, and Colin Thompson, Health and Safety Adviser for Coys Rail, have given us their outlook on what it is that makes the workplace a healthy place to be.



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- Train Operation Reports pages 4,5
- Signalling Reports page 6
- Tram Reports page 7
- Infrastructure Reports pages 8-9
- London Underground Reports page 10

What role do you perform within the rail industry?

I have been a member of Station Staff at Thornaby station for 11 years. The role consists of ensuring that the platform is safe, providing passenger assistance, making announcements to awaiting the train. I am also

a Wellbeing Champion for TransPennine Express who discuss a wide variety of health and wellbeing issues both at home and work.

What do you think makes a healthy work environment?

A healthy working environment covers many aspects, including comfortable seating, a suitable counter and desk height, not having too much or too little light, good lighting and ventilation are all important. An appropriate staff area is also essential for both

physical and psychological health. Outdoor training, the risks of slips, trips and falls as well as "feeling safe" from intruders and attacks are key to a healthy environment.

What prevents a work environment from being healthy?

Poor cleanliness and housekeeping increase the risk of slips or accidents as well as the potential for fire. Bulking or lack of cooperation from colleagues should also prove a problem. It's always going to be a problem as people tend not

wellbeing issues are given the appropriate attention at work.

I think that great things can come from monitoring the physical effects on health and wellbeing but there is always room for improvement. We all try and follow the five Group principles regarding occupational health but psychologically there is always going to be a problem as people tend not

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Implementation of NR Health & Wellbeing Strategy



Health and Wellbeing: 6 Point Plan Summary

Objective

The objectives of the 6 Point Plan are a) to support the delivery of our Health and Wellbeing Strategy, b) to contribute towards our target of eliminating all new and worsening occupational related health disorders, (c) to improve the health and wellbeing of our people, and (d) to underpin our Vision of 'everyone fit for the future'. The Plan provides a number of targeted interventions which, when implemented with sufficient pace and rigour, will provide a sustainable step-change in the health and wellbeing of our organisation.

Scope

Components of the plan are: 1. Health Data and Management Information (MI), 2. Hand Arm Vibration Syndrome 3. Occupational-Related Respiratory Conditions 4. Mental Wellbeing, 5. Musculoskeletal Conditions, 6. Healthy Facilities

Culture

Fair

Open

Learning

Inclusive

Innovative

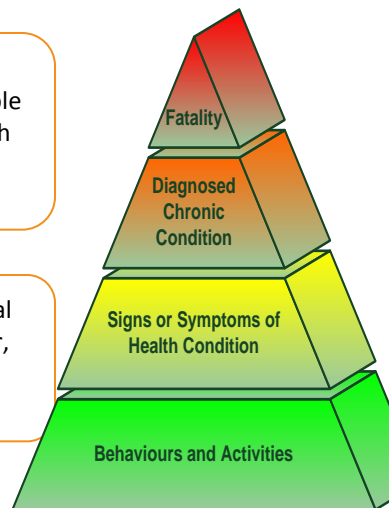
Risk-Aware

Impact

Network Rail will achieve the processes required to prove legal compliance, will be able to identify trends and impact related to health and will have the building blocks in place to support our people's wellbeing

Culture

This plan will touch all elements of our cultural aims and will support our move towards a fair, inclusive, innovative and risk-aware culture



Team

Given the breadth and complexity of the challenges, a number of cross functional teams will deliver each part of the plan. Members of teams will be used as required, with some having regular involvement and others acting as points of contact or giving input as required

Target

Increased participation in health surveillance across Network Rail
Robust and accurate health and wellbeing data collected and assessed
Mental wellbeing and musculoskeletal health trials completed in selected strategic business units

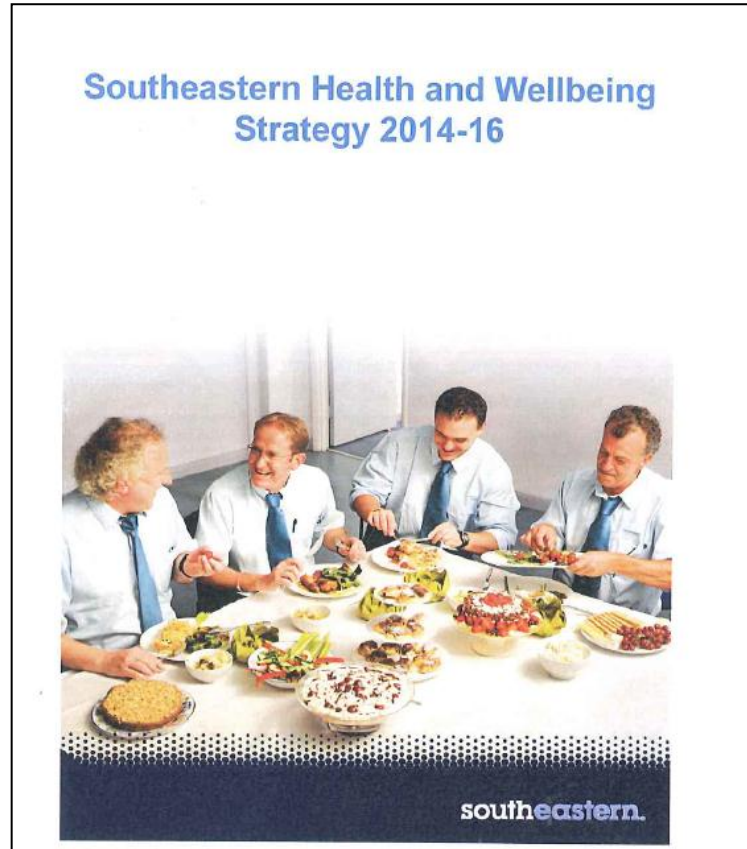
Risks

1. Executive level support drops off.
2. Lack of resources to deliver the programme
3. Big incident changes priorities.
4. Routes/IP deviate from programme
5. TUs/Employees do not support our programme

Links

1. Safety and Wellbeing Strategy
2. Sustainability Strategy
3. HR
4. Diversity and Inclusion
5. ORR Occupational Health Strategy

Transport for London & TOC strategies



Thank you
Any questions?

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