



# International Railway Safety Conference

19-21 October 2020

Webinar Series

## Network Rails Engineering Response to the Covid-19 Pandemic

*A view from the Technical Authority and Regional Teams*

# NR Overview

- 20,000 miles of track
- 30,000 bridges, tunnels and viaducts
- Thousands of signals and level crossings
- Over 33,000 Staff across 14 Routes



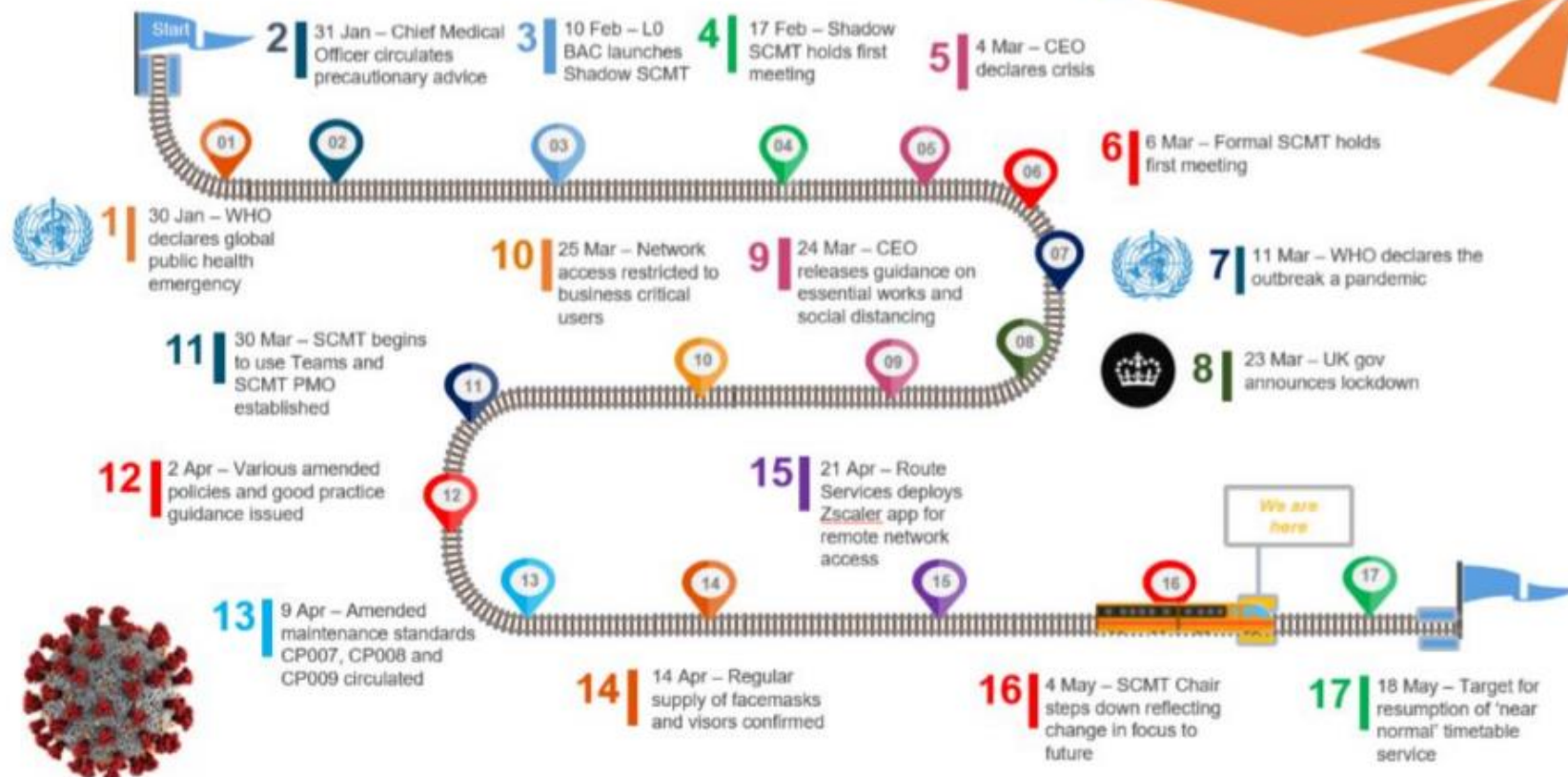
## Network Rail Regions and Routes

- Eastern**
  - 1 Anglia Route
  - 2 East Midlands Route
  - 3 North and East Route
  - 4 East Coast Route
- North West and Central**
  - 5 North West Route
  - 6 Central Route
  - 7 West Coast Mainline South Route
- Scotland's Railway**
  - 8 Scotland Route
- Southern**
  - 9 Kent Route
  - 10 Sussex Route
  - 11 Wessex Route
  - 12 Network Rail High Speed
- Wales & Western**
  - 13 Wales Route
  - 14 Western Route



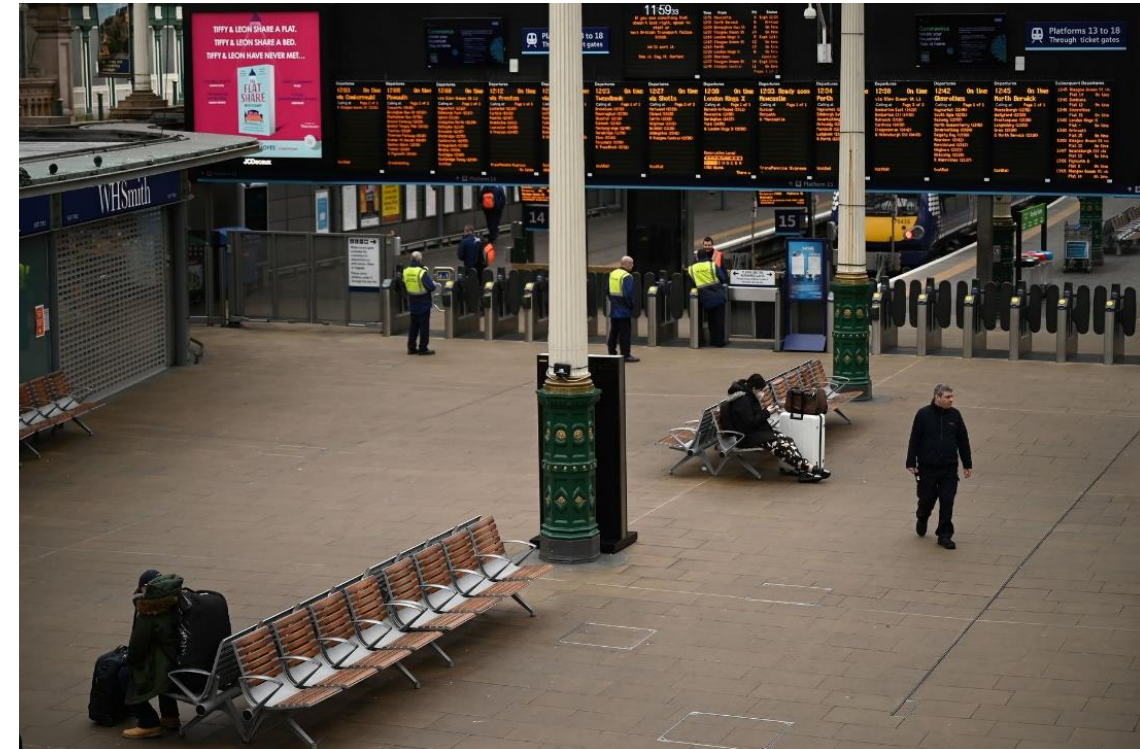
# Covid-19 Timeline

## COVID-19 and Network Rail's Response



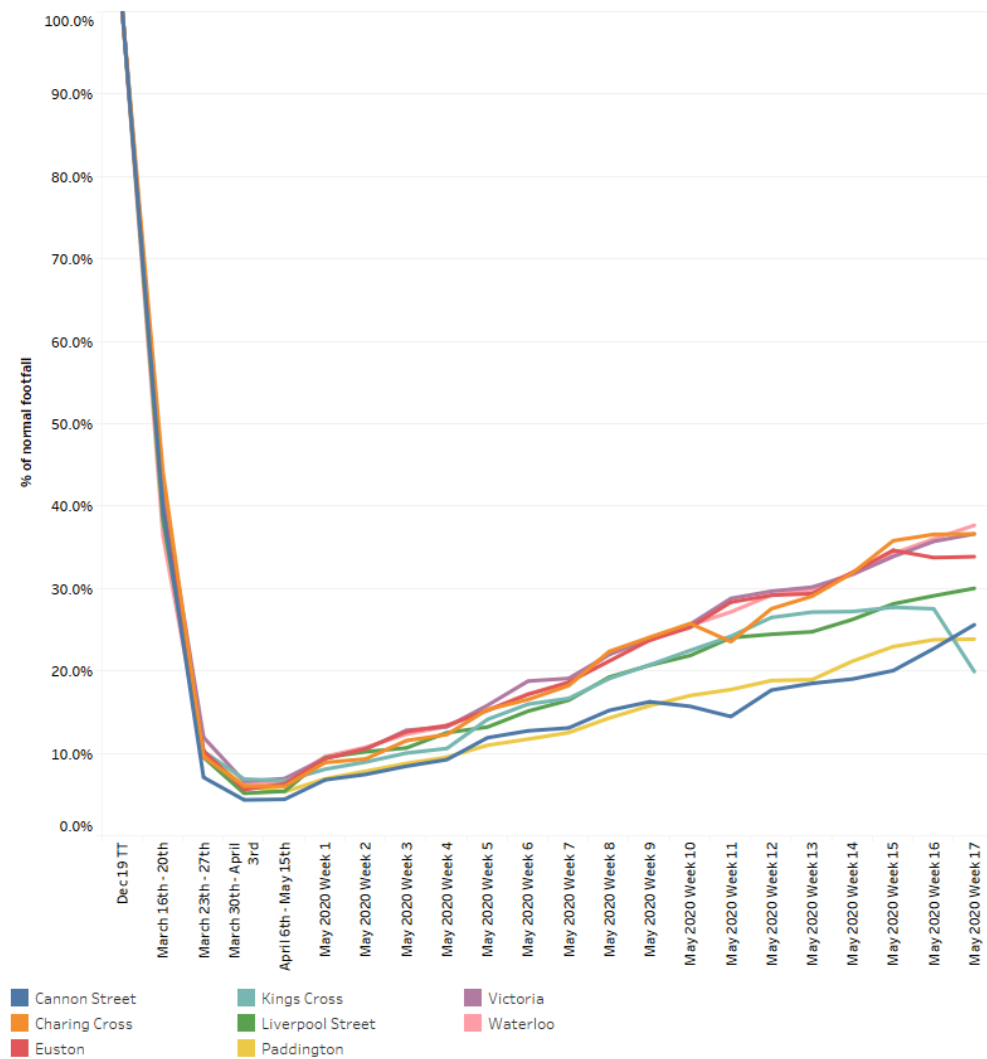
- 31/12/19 – China notified WHO of a series of pneumonia cases in Wuhan
- 31/01/20 – First confirmed case in the UK
- 05/03/20 – First death in the UK.
- 11/03/20 – WHO officially declare COVID-19 a pandemic.
- 20/03/20 – Schools Shut
- **23/03/20 – Boris Johnson announced lockdown measures to be implemented**
- 10/05/20 – Partial lifting of measures in England.
- 18/05/20 – Rail services upped from 50% - 80%.

# What this meant?

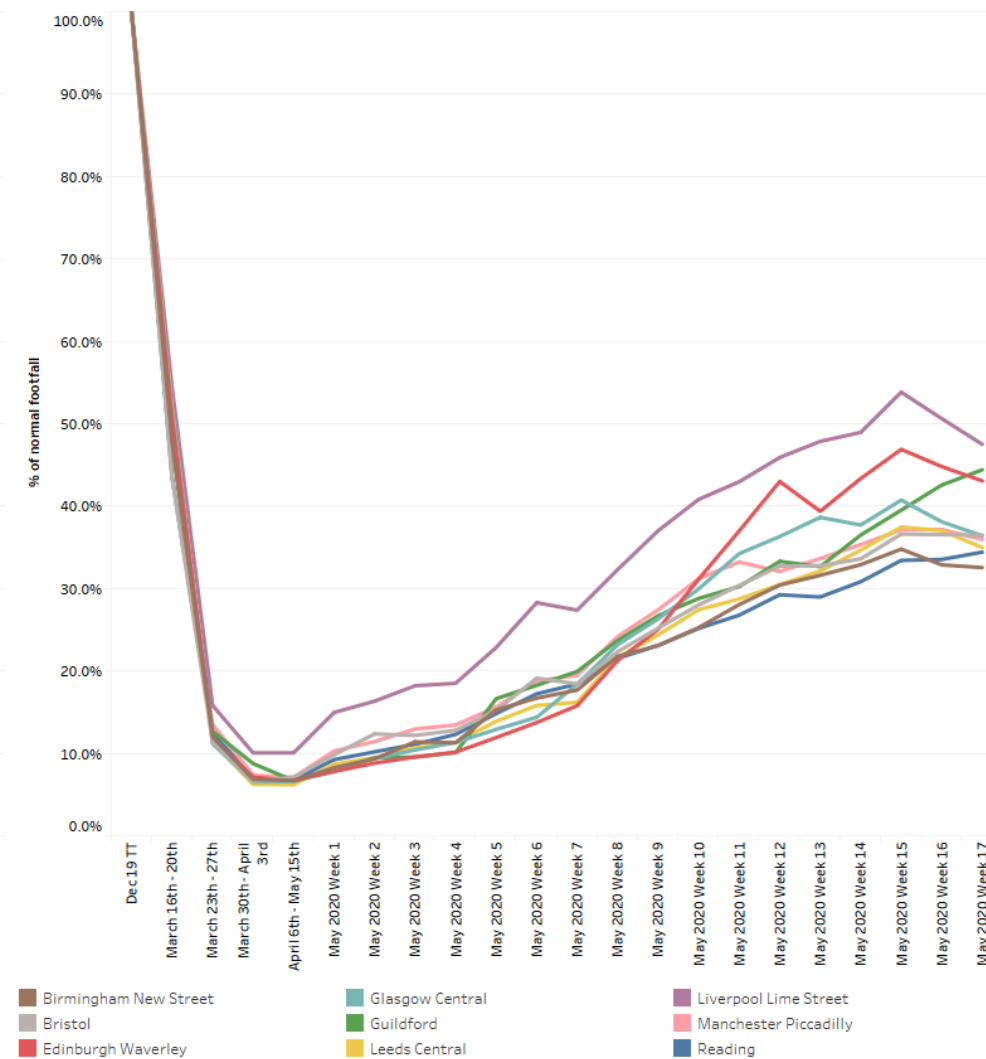


# What this meant?

NR Managed - London - % of normal footfall (Weekday)



NR Managed - Non-London - % of normal footfall (Weekday)



# What this meant?



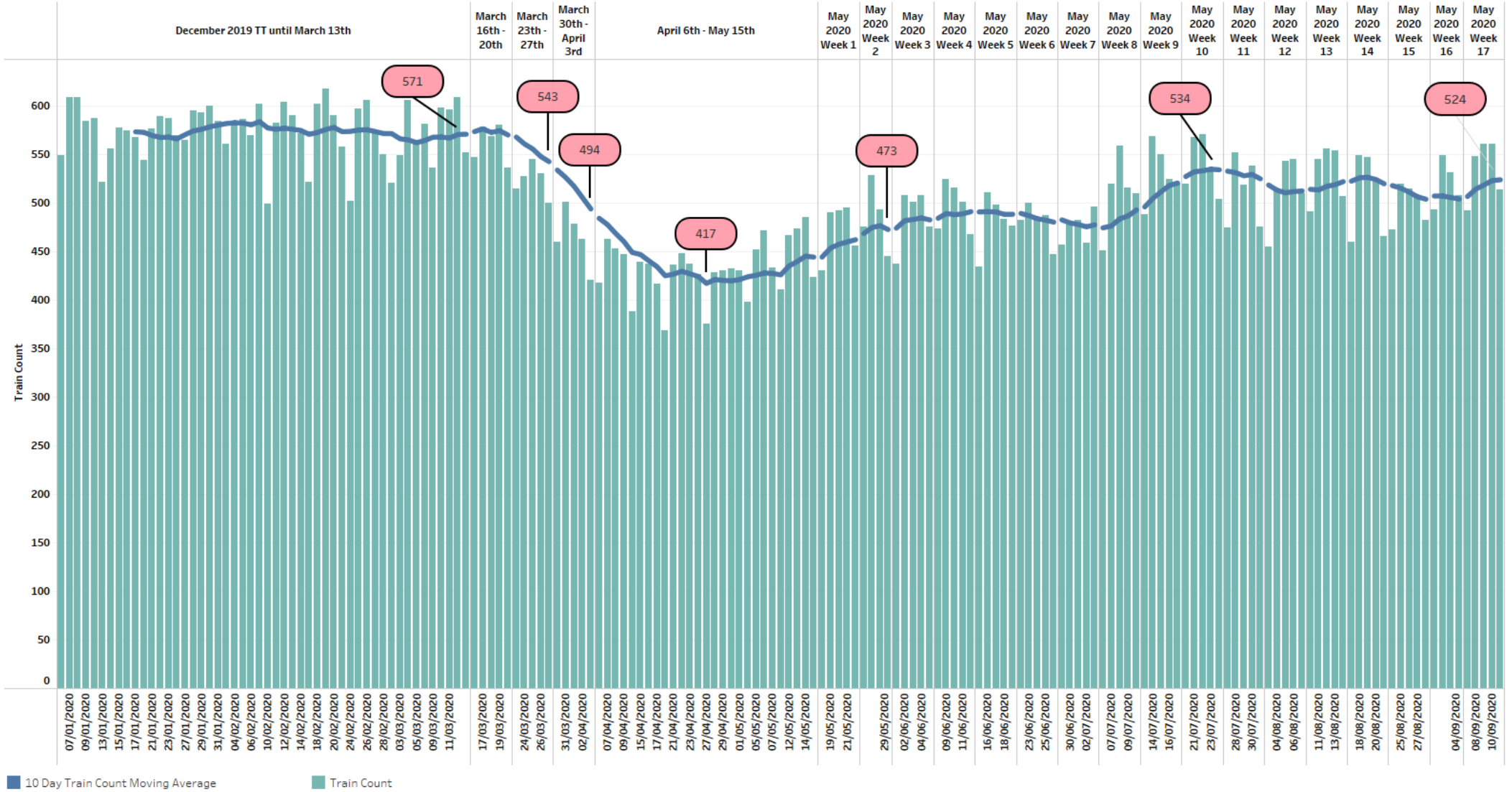
## Passenger Operator - Trains Planned

% of 'normal' service Planned by Operator

	ETT (w/c March 23rd)	ETT (w/c March 30th)	ETT (April 6th - May 16th)	May 20 TT - Week 1	May 20 TT - Week 2	May 20 TT - Week 3	May 20 TT - Week 4	May 20 TT - Week 5	May 20 TT - Week 6	May 20 TT - Week 7	May 20 TT - Week 8	May 20 TT - Week 9	May 20 TT - Week 10	May 20 TT - Week 11	May 20 TT - Week 12	May 20 TT - Week 13	May 20 TT - Week 14	May 20 TT - Week 15	May 20 TT - Week 16	May 20 TT - Week 17
<b>TfL Rail</b>	81%	68%	71%	86%	86%	84%	89%	90%	92%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Southeastern</b>	66%	67%	67%	72%	72%	73%	73%	73%	73%	73%	84%	84%	84%	73%	84%	86%	86%	86%	87%	98%
<b>EMR</b>	59%	60%	60%	80%	80%	80%	80%	80%	80%	80%	80%	80%	81%	81%	81%	82%	82%	81%	82%	97%
<b>c2c</b>	59%	40%	43%	96%	97%	96%	97%	97%	97%	96%	97%	97%	96%	97%	95%	96%	96%	97%	97%	97%
<b>L. Overground</b>	70%	51%	52%	79%	80%	79%	79%	81%	86%	86%	86%	85%	86%	85%	86%	85%	86%	85%	86%	96%
<b>Merseyrail</b>	65%	57%	47%	60%	60%	60%	60%	60%	60%	60%	77%	77%	77%	77%	77%	77%	77%	77%	77%	95%
<b>Greater Anglia</b>	60%	59%	62%	75%	75%	75%	75%	80%	80%	80%	93%	93%	93%	93%	93%	93%	91%	94%	93%	94%
<b>Chiltern</b>	41%	42%	38%	78%	78%	78%	78%	78%	78%	78%	93%	93%	93%	93%	93%	93%	93%	93%	93%	94%
<b>Avanti WC</b>	49%	49%	49%	65%	65%	66%	67%	68%	69%	69%	90%	91%	91%	91%	91%	93%	90%	93%	93%	92%
<b>WMT</b>	69%	57%	53%	63%	63%	63%	63%	64%	64%	64%	70%	70%	70%	70%	70%	70%	70%	73%	73%	91%
<b>ScotRail</b>	51%	42%	43%	43%	43%	48%	48%	63%	64%	63%	65%	64%	65%	64%	91%	87%	87%	87%	88%	88%
<b>SWR</b>	58%	58%	58%	64%	64%	69%	71%	75%	74%	74%	87%	86%	87%	87%	87%	87%	87%	87%	86%	86%
<b>GWR</b>	54%	51%	53%	69%	70%	71%	71%	71%	71%	71%	82%	82%	82%	83%	83%	83%	83%	83%	84%	84%
<b>LNER</b>	73%	43%	39%	68%	68%	68%	68%	68%	68%	68%	79%	79%	79%	78%	79%	79%	79%	79%	78%	84%
<b>GTR</b>	76%	60%	60%	77%	78%	77%	78%	78%	78%	78%	83%	83%	83%	83%	83%	83%	83%	83%	83%	84%
<b>TPE</b>	37%	36%	36%	71%	73%	73%	73%	79%	74%	73%	76%	76%	76%	76%	76%	76%	76%	76%	76%	77%
<b>Northern Trains</b>	59%	46%	47%	64%	64%	63%	63%	63%	64%	63%	69%	69%	70%	71%	71%	71%	71%	71%	71%	71%
<b>TfW Rail S.</b>	64%	52%	47%	50%	51%	51%	50%	51%	50%	50%	69%	70%	70%	70%	70%	69%	66%	69%	69%	71%
<b>Grand Central</b>	45%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	57%	57%	57%	57%	68%	68%	68%
<b>CrossCountry</b>	55%	55%	52%	54%	54%	54%	54%	54%	54%	54%	61%	61%	61%	61%	62%	61%	61%	61%	61%	62%
<b>HEX</b>	50%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%
<b>Hull Trains</b>	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	31%	31%	31%	31%
<b>Caledonian S</b>	54%	29%	40%	46%	43%	57%	57%	57%	57%	43%	43%	60%	71%	71%	69%	71%	71%	71%	71%	71%
<b>National</b>	63%	54%	54%	68%	68%	69%	69%	71%	72%	72%	79%	79%	80%	79%	82%	82%	82%	82%	83%	86%

# What this meant?

### Freight Train Count



# What did we do?

## COVID-19 Standards and Risk Assessments

### Work Activity Risk Assessments: COVID-19

- COVID-19 Work Activity Risk Assessment V6
- Delivering Training during COVID-19 Pandemic V3

### COVID-19 Activity Risk Assessment

#### Work Activity Risk Assessment Form.

<b>Work Activity Assessed:</b>	COVID-19 Activity Risk Assessment	<b>Ref. No.F</b>	
<b>Short Description</b>	Working during COVID 19 crisis - minimum distance apart from others of 2 metres should be kept at all times in order to minimise the potential for spreading the virus by saliva or droplets from coughing		
<b>Function:</b>	Network Rail staff	<b>Discipline or Department:</b>	Safety, Technical, Engineering
<b>Location/site of work activity:</b>	Across the Network	<b>Date Assessment carried out:</b>	31 March 2020
<b>Groups at risk:</b>	All Network Rail Employees Infrastructure and operations staff	<b>Previous assessments superseded:</b>	N/a
<b>Persons carrying out assessment:</b>	<b>Name:</b>	<b>Positions:</b>	
	Louise Cox, Rupert Lown, Ian Bradler, David Smith, Paul Clark, Nicola Uijen, Natalie Montgomery, Mark Lunn	Regional HSQE Directors	
	Chris Adair, Brett Cornwell, Des More	Trade Union representatives	
<b>Peer Review</b>	Lead TU Representatives & Business Leads	Names (Print):	
<b>Reviewed and Approved by:</b>	Rupert Lown 	Names (sign)	

### COVID-19 Activity Risk Assessment

#### Executive Summary

Safety professionals and trades union health and safety representatives reviewed the modes of transmission, risks and appropriate precautions to minimise COVID-19 transmission during work activities. The assessment underlines the importance of anyone with COVID-19 symptoms staying away from work and for those who are at work to keep the railway open, to maintain the two-metre social distance wherever possible and to regularly wash or sanitise their hands. Normal work gloves and eye protection help to minimise hand-face contact. Site marshals can be used to help remind staff about maintaining social distance and hand hygiene. Organise travel to site that maintains two-metre social distance by using temporary screens in vans between the driver and rear passenger or using your own vehicle/black-cab taxi.

But some essential work does require people to work closer together for short durations for specific tasks. 37 maintenance tasks likely to involve working within two metres have been specifically assessed to devise the safe working arrangements. If that is necessary, the risk assessment advises keeping the duration as short as possible and orienting yourselves to avoid facing the other person if possible. If working close together is unavoidable, a face visor or a surgical mask can be used to avoid spread of liquid droplets (which can contain virus even if the person is not showing COVID-19 symptoms) to your colleagues. Particular care is necessary if a mask is used to avoid contacting your face with potentially contaminated hands or gloves. The visor or surgical mask do not replace existing impact eye protection or protective mask such as for dusty environments; they must be used if the task risks require so.

Traveling to locations in a road vehicle	Staff being within a 2m social distancing	Contraction of virus; Spread of virus; Lost-time illness; Death of sufferer; Increased spread of the virus	Cleaning of Vehicles /tools Teams to utilise the same tools and vehicles Use disinfecting kits where supplied Do not share with other teams Use of separation screen for vans	5	2	7	Travel one person per vehicle Allocate NR vehicles to specific users Use private vehicles where practicable Where hire cars are used request disinfectant and clean before delivery wipe done seats and controls prior to use	5	1	6
<b>Additional local factors that should be considered</b>	This is a generic risk assessment, additional risks and subsequent measures are to be considered at the time inspections and minor repairs of boundary fences are taking place, further local assessment is required on specific requirements, location, weather conditions, environment and time. The additional measures are to be documented, and briefed to the affected parties, by the person in charge or COSS Network Rail's Life Saving Rules to be applied at all times when undertaking work activities. Network Rail's Safety Vision to be applied by all staff.									



# What did we do?



OFFICIAL-SENSITIVE

Ref:	NRL/MT/CP007
Issue:	2
Date:	17 Apr 2020
Compliance date:	14 Apr 2020

## OFFICIAL-SENSITIVE

### COVID-19 Contingency Plan

#### Relaxation of Specific Red Clauses, Extension on Occupational Competence and Guidance on Prioritisation of Inspection and Maintenance Activities

Content approved by:

Ian Griffiths,  
Standards & Control Document Owner

Content approved by:

John Edgley,  
STE Chief Engineer

Content approved by:

Martin Frobsher,  
Group Safety, Technical & Engineering Director

Content approved by:

John Winchitt,  
Standards & Controls Management Team

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OFFICIAL-SENSITIVE

Ref:	NRL/MT/CP008
Issue:	3
Date:	01 May 2020
Compliance date:	08 May 2020

## Level 2

### Manual

#### COVID-19 Works Contingency Plan

Approve

Content approved by:

Ian Griffiths,  
Standards & Control Document Owner

Content approved by:

John Edgley,  
STE Chief Engineer

Content approved by:

Martin Frobsher,  
Group Safety, Technical & Engineering Director

Content approved by:

John Winchitt,  
Standards & Controls Management Team

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OFFICIAL

Ref:	NRL/MT/CP009
Issue:	3
Date:	07 Apr 2020
Compliance date:	07 September 2020

## Level 3

### Work instruction

#### COVID-19 Contingency Plan: Safe Working Practices

Content approved by:

Ian Griffiths,  
Standards & Control Document Owner

Content approved by:

Rupert Lewis,  
Technical Authority, Chief Health Safety & Quality

Content approved by:

John Edgley,  
STE Chief Engineer

Content approved by:

Martin Frobsher,  
Group Safety, Technical & Engineering Director

Content approved by:

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# What did we do?

OFFICIAL-SENSITIVE

Ref:	NR/L2/MTC/CP008
Issue:	3
Date:	01 May 2020
Compliance date:	08 May 2020

## Level 2

## Manual

## COVID-19 Works Contingency Plan

Approvals

Content approved by:

.....  
Ian Griffiths,  
Standard & Control Document Owner

Content approved by:

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John Edgley,  
STE Chief Engineer

Content approved by:

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Martin Frobisher,  
Group Safety, Technical & Engineering Director

Content approved by:

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John Winnifith,  
Standards & Controls Management Team

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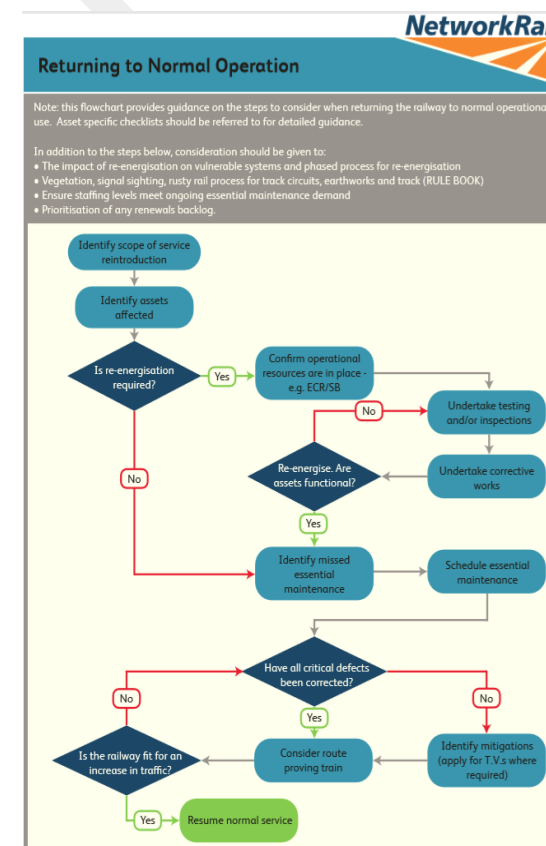
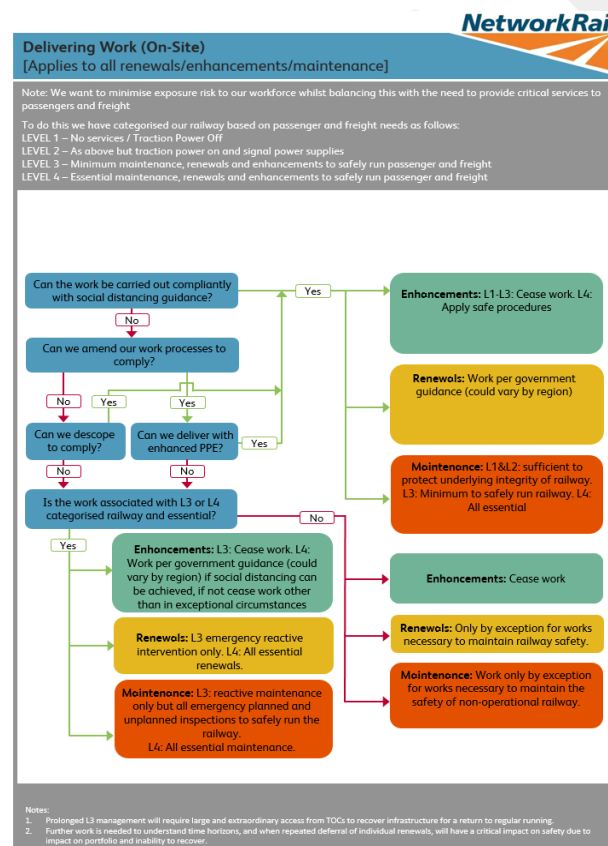
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## 2 Essential activities

### 2.1 Overview

Essential activities are the activities that are needed to support safety and core asset availability including preparatory work for year round weather resilience, and vehicle and equipment maintenance. They are the activities required to keep the train services that have been specified by the government running safely and sustainably for a worst-case lockdown period of 6 months. They will enable a return to normal service levels within 3 months and without speed restrictions due to work backlog after COVID-19 restrictions are lifted. They also include renewals/refurbishment and enhancement works that in line with government guidance.



# What did we do?

OFFICIAL-SENSITIVE

Ref:	NR/L3/MTC/CP007
Issue:	2
Date:	7 <sup>th</sup> April 2020
Compliance date:	14 <sup>th</sup> April 2020

**OFFICIAL-SENSITIVE**

## COVID-19 Contingency Plan

### Relaxation of Specific Red Clauses, Extension of Occupational Competence and Guidance on Prioritisation of Inspection and Maintenance Activities

Content approved by:

.....  
Ian Griffiths,  
Standard & Control Document Owner

Content approved by:

John Edgley,  
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# What did we do?

OFFICIAL

Ref:	NRL3-MTC-CP009
Issue:	5
Date:	28 August 2020
Compliance date:	07 September 2020

## Level 3

### Work instruction

#### COVID-19 Contingency Plan: Safe Working Practices

Content approved by:

Ian Griffiths,  
Standard & Control Document Owner

Content approved by:

Rupert Lowen,  
Technical Authority, Chief Health Safety & Quality

Authorised by:

John Edgley,  
Technical Authority, Chief Engineer

Authorised by:

PP Martin Frobisher,  
Group Safety, Technical & Engineering Director

Content approved by:


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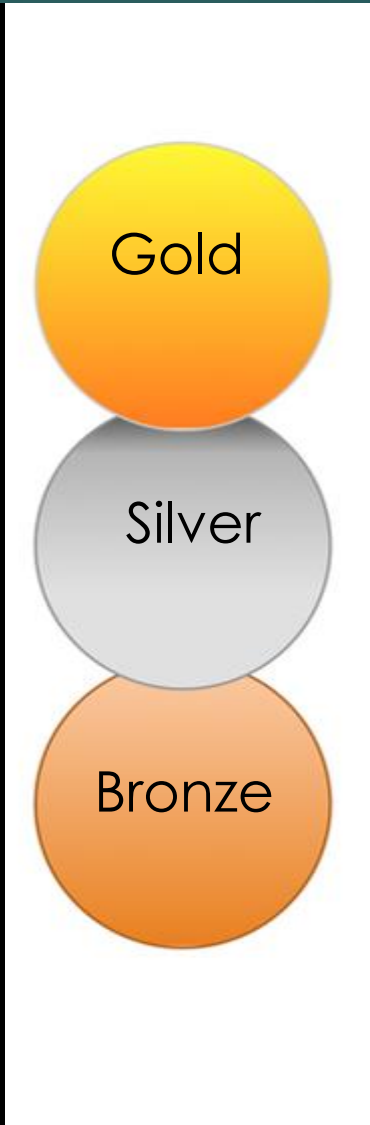
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 HM Government  
 Supported by  
**Coronavirus**  
**Wash your hands more often for 20 seconds**  
 Use soap and water or hand sanitiser.  
 For more information and the Government's Action Plan go to [nhs.uk/coronavirus](https://nhs.uk/coronavirus)  
**PROTECT YOURSELF & OTHERS**

**Communications**




We have put together some further guidelines for those working on site.

**Getting to site**

- Wash your hands with soap and/or use hand sanitiser before entering and after exiting the vehicle.
- Clean the vehicle surfaces with disinfectant.
- In teams where Home Office is required, ensure you use with disinfectant.
- back to work for
- If a Network
- Do not
- When

**Working on site**

- Safety is our first priority. Normal working methods and practices still apply and everyone is expected to comply with the relevant company standards.
- If you can, bring your own prepared food to site and consider bringing your own utensils.
- Do not share food, cups or utensils or make rounds of drinks for your colleagues.
- Avoid sharing communication equipment. Where this is unavoidable, clean the equipment before and after use.
- Please continue to wear full PPE and always use your own. If possible, clean and charge your coversalls after each shift. Those of you used to wearing masks should continue to wear these if available.
- Vehicles and equipment should be cleaned using disinfectant, cleaning products and paper towels.
- The cabs for road-mal plant must be cleaned between shifts.
- All items used for cleaning should be collected in the same disposal bag and marked so that it can be disposed of safely.

is observed,  
 Where briefings must be observed,  
 the minimum site number required.  
 To avoid the need for forms to be shared, the persons in charge will  
 work group.  
 Regularly clean and disinfect shared surfaces.  
 Stagger starting and finishing times for different teams to minimise contact.





# Regional specific engineering addendums



# New Ways of Assuring

DI	TME	GAP	Trend	CAT mismatch	Trend	Late / Unplanned	Trend	CMT 20/01 - 54				
								>50m/h	Trend	50m/h	Trend	BBP
Bletchley	Bletchley	0	0	1	0	2	0	1	0	2	0	2
	Rugby	88	0	34	0	7	0	11	0	0	1	1
Euston	Euston	10	0	43	0	63	0	2	0	18	0	0
	Warford	6	0	1	0	5	0	0	0	6	0	0
Stafford	Nuneaton	2	0	13	0	4	0	5	0	2	0	0
	Stafford	2	0	0	0	0	0	0	0	1	0	0

Northwest Route Pulse Check

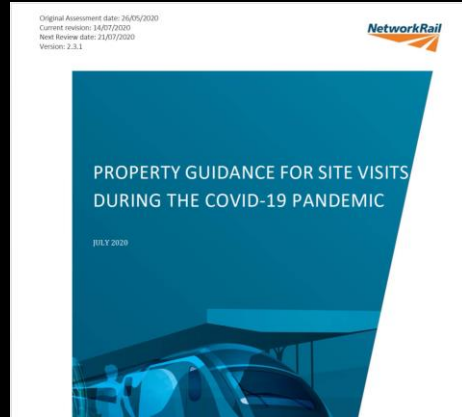
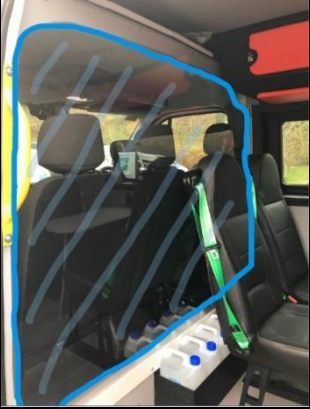
ROUTE	EPME/DEPOT	% Balance Weight Surveyed	Count of Count of			Planned BW works (<38°C)	Unplanned
			21-25°C	26-30°C	31-37°C		
CENTRAL	Sandwell & Dudley	93%	4	16	73	90	

ROUTE	EPME/DEPOT	% Balance Weight Surveyed	Count of 30°C	Count of 34-37°C	Planned BW works (<38°C)	Unplanned
100%			0	5	5	
100%			2	0	2	
100%			1	1	2	
100%			1	3	4	
100%			4	19	23	



North West and Central Region – Backbone of Britain



# Looking after our people



North West and Central Region – Backbone of Britain



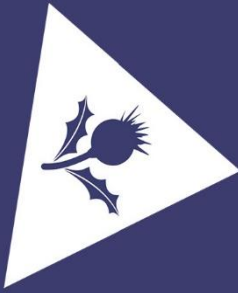
# Track and drainage renewals – Kilsby Tunnel



Opportunities



North West and Central Region – Backbone of Britain



# International Railway Safety Conference

19-21 October 2020

Webinar Series

Thank you for listening