Ref:	NR/L2/TRK/001/mod13
Issue:	8
Date:	07 September 2019
Compliance date:	07 December 2019

NR/L2/TRK/001

Module 13

Track Hand Back; Confirming track is safe for selected line speed after engineering work

Emergency change

Issue date: 25 March 2020
Compliance date: 25 March 2020
Expiry date: 10 July 2020

An emergency change is attached to this standard/control document.

This emergency change mitigates an urgent safety risk that cannot await a full review of this standard/control document.

This emergency change will expire on 10 July 2020.



Tara Scott, Professional Head of Track

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Reference documentation

TEF3202	Level 1 Handback / Speed Raising Certificate
TEF3203	FORM G: INFRASTRUCTURE CONFORMANCE CERTIFICATE
TEF3246	Certificate of Competence - Authorised persons levels 2, 3 & 4
TEF3071	OTM Site Check and Handback

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1 Scope

This module applies when inspecting the line in order to:

a) confirm that the track is safe for the passage of trains during and on completion of engineering work carried out under traffic;

b) confirm that the track is safe for the passage of trains on the completion of engineering work carried out under a line blockage;

c) raise or remove an emergency speed restriction (ESR) or temporary speed restriction (TSR); and

d) raise the permanent line speed (PSR).

The use of this module does not provide authority to give up line blockages.

This module does not apply when removing TSRs that have been imposed solely for the protection of staff.

It does not apply when removing ESRs which have been applied in connection with hot weather Critical Rail Temperature management.

Adherence to this module allows Network Rail to demonstrate compliance with the Railway and Other Guided Transport Systems (Safety) Regulations 2006 [ROGS], in particular the law on safety critical work.

2 Risk management

Risks arise when undertaking work due to:

a) disturbance to the asset;

b) the type and method of work;

c) the condition of the site at the end of the work.

Consequences are primarily dependent upon the speed of traffic on hand back of the track following the work.

Management of the above risks is required by the ROGS Regulations:

For safety critical work (see Appendix A), ROGS require:

d) appropriate work to be planned;

e) the staff implementing, directing and supervising the work to be competent;

f) quality of work undertaken to be controlled;

g) all work activities completed to be recorded;

h) a site inspection to confirm the asset is fit for traffic on completion of work by a competent person.

Risks can also arise due to the deterioration of the asset under normal operating conditions which may require the imposition of an ESR or TSR.

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3 Inspection of track following engineering work (hand back) or to raise a line speed

A competent Authorised Person shall undertake an inspection on the completion of engineering work to:

a) confirm the track is safe for existing line speed, or

b) confirm the track is safe for an increased line speed.

The inspection of the track is undertaken to confirm it is safe for a particular line speed in accordance with NR/L2/TRK/001 and other applicable Network Rail standards and specifications.

The inspection is a review of the stability, position and physical characteristics of the track (construction, track geometry, clearances and component condition).

4 Achieving competency

Following training and assessment, authorised persons shall be mentored and certified by competent managers.

The certifying manager can only award competency up to the level of their own authority.

NOTE: *The arrangement could be; Level 1 signed off by a competent SM[T], Level 2, 3 and 4 signed off by a competent Track Maintenance Engineer.*

Evidence of experience gained by Authorised Persons should be considered prior to certifying them for higher line speed hand backs.

5 Authorised Persons

Issue all Authorised Persons with a certificate of competency which shows their level of authority (and any limitations).

See TEF3246 for an example certificate.

The engineering manager shall maintain a record of all Authorised Persons with details of:

a) their training, mentoring and experience;

b) the activities and scope of work to which their approved authority applies;

c) the maximum line speed to which they are permitted to open at or raise to.

NOTE: *Within Maintenance, the engineering manager would normally be the Infrastructure Maintenance Engineer.*

6 Track competencies

Table 1 contains information on the competencies relevant to reopening the line to traffic (hand back) and raising a line speed. It also shows the initial authority level for each competency.

The attainment of some competencies is dependent on achieving pre-requisite entry level competencies.

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Table 1 - Applicable track competencies (and link to initial authority level)

Competence code	Activities Covered by Competence	Initial Authority Level *(see note 1)*
Tr05	Establish track geometry and restore by mechanised repair (tamper or stoneblower). *This authority includes handback of the line after work but DOES NOT include raising or removing a speed*	Level 2
Tr11	Confirm track is fit for operational purposes following manual maintenance repair or reported rough ride. Remove 20mph defect ESR.	Level 1 (see note 2)
Tr12	Confirm track is fit for operational purposes following heavy maintenance work. Raise or remove condition of track (COT) ESR or TSR.	Level 2
Tr13	Confirm track is fit for operational purposes following track renewal work. Raise or remove 'Trackwork' ESR or TSR.	Level 2

Notes:

1. After training and assessment (classroom) and local mentoring.
   Further mentoring and local assessment is required to move the competence to a higher level.
2. Persons holding Tr11 cannot hold an authority level higher than Level 1.

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7 Inspection requirements

Table 2 defines the authority levels required by the Authorised Person, when the inspection is to be undertaken and the method of recording the inspection.

For the activities listed, the requirements in Table 2 shall be applied.

Table 2 – Inspection Requirements

	Activity	Competency code	Speed range	Authority level required (1)	When to inspect	Inspection form to be completed
1	*[not used]*					
2	Undertake maintenance work, planned in Ellipse, with the line open to traffic Confirming that track is safe for continued unrestricted use by trains.	Tr11	Any	Level 1	During work and before leaving site	Ellipse works order *(2)*
3	Hand back track following manual maintenance work planned in Ellipse, undertaken with a line blockage	Tr11	Any	Level 1	Before opening line to traffic	Ellipse works order *(2)*
4	Hand back track following engineering work, undertaken with a line blockage, using one of the following on-track machines: • Tamper; • S&C tamper; • Stoneblower, • Multipurpose Stoneblower used on plain line;	Tr05	Up to 60mph	Level 2	During work and before opening line to traffic	TEF3071
			65 to 90mph	Level 3		
			Above 90mph	Level 4		
	• Multipurpose Stoneblower used on S&C.	Tr05	Up to 90mph	Level 3	During work and before opening line to traffic	TEF3071
			Above 90mph	Level 4 *(3)*		
5	Respond to trains stopped or cautioned by signaller due to: • rough ride report (see clause 10) • objects on the line report (see clause 11) • flooding report	Tr11	Any	Level 1	Before lifting the caution/ opening line to traffic	TEF3202

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Table 2 – Inspection Requirements

	Activity	Competency code	Speed range	Authority level required (1)	When to inspect	Inspection form to be completed
6	Remove 20mph ESR imposed for track defect: *(including, but not limited to)* • rail defect / broken rail • broken fishplate • temporary joint • adjustment switch support	Tr11	Any	Level 1	Before removing ESR	TEF3202
7	Confirm track condition is fit to raise line speed to 50mph over a temporary clamped joint	Tr11	Any	Level 1	Before opening at 50mph *(4)*	TEF3202
8	Confirm track is fit for operational use to remove 'condition of track' (COT) ESR or TSR includes cyclic top ESRs *(5)*	Tr12	Up to 60mph	Level 2	Before removing ESR/TSR	TEF3203
			65 to 90mph	Level 3		
			Above 90mph	Level 4		
9	After completion of mechanised maintenance work or refurbishment work, confirm track is fit for operational use to: o hand back track at current/planned line speed OR o remove 'trackwork' TSR.	Tr12	Up to 60mph	Level 2	Before opening to traffic or removing TSR	TEF3203
			65 to 90mph	Level 3		
			Above 90mph	Level 4		
10	After completion of renewal work, confirm track is fit for operational use to: o hand back track at current/planned line speed OR o remove 'trackwork' TSR	Tr13	Up to 60mph	Level 2	Before opening to traffic or removing TSR	TEF3203
			65 to 90mph	Level 3		
			Above 90mph	Level 4		

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Table 2 – Inspection Requirements

	Activity	Competency code	Speed range	Authority level required (1)	When to inspect	Inspection form to be completed
11	Confirm track is fit for operational use to raise a permanent speed restriction (PSR) or enhanced permissible speed *(6)*	Tr13	Any	Level 4 *(6)*	Before raising PSR	TEF3203

Limitations and restrictions:

1. If an inspection is required to raise or remove a speed, the engineering work review (for hand back) can be combined with the inspection.

   The authority required for the highest risk work shall be applied.

2. If work has not been planned in Ellipse, record inspection using TEF3202.

3. Where the Multipurpose Stoneblower is used on S&C and the line is to be opened above 90mph, the inspection shall be undertaken by a Level 4 Track Maintenance Engineer or other Level 4 authorised by the Route Asset Manager [Track].

4. Conditions shall satisfy requirements detailed in NR/L2/TRK/001/mod04. If these conditions are not met, the speed over a temporary clamped joint shall not be raised above 20mph.

5. Undertake inspections for removal of cyclic top speeds only after the specified ‘settlement’ period has elapsed (see NR/L2/TRK/001/mod11).

6. This activity shall only be undertaken by the RAM[Track] or a TME authorised by the RAM[T].

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8 Selection of appropriate sections of TEF3203 to be completed

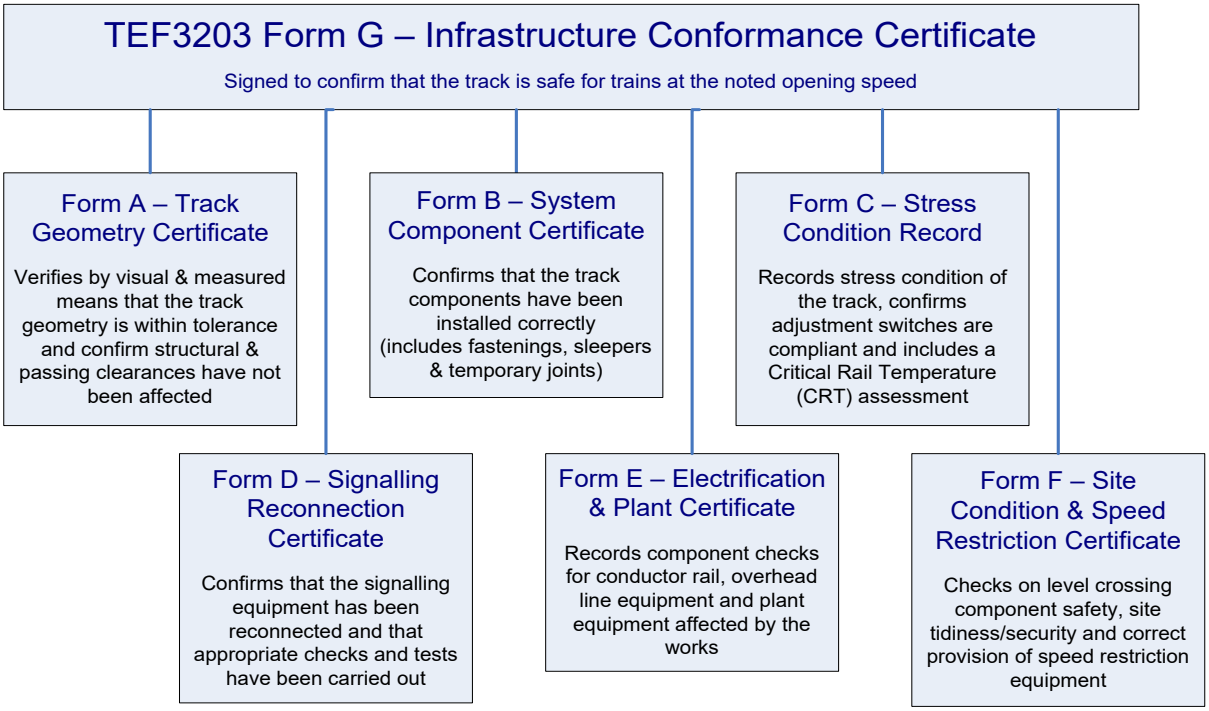
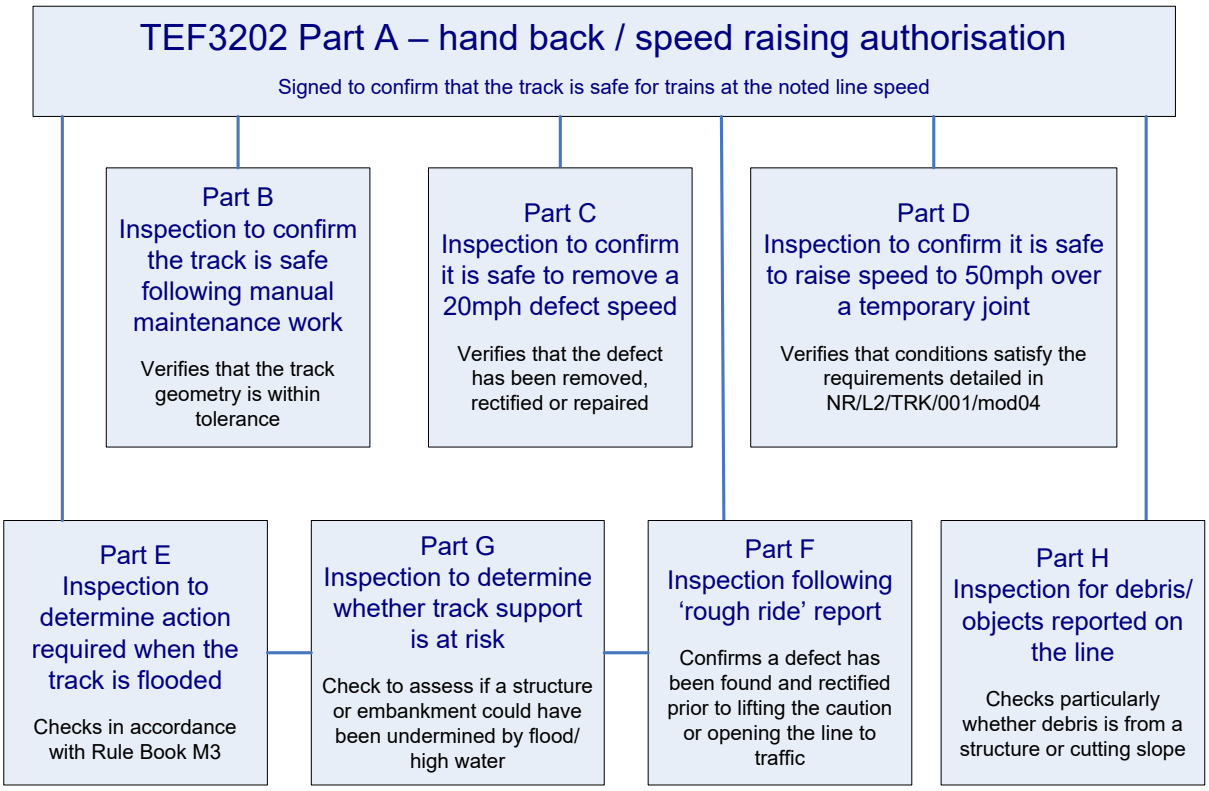


Figure 1 – TEF3203 completion

9 Selection of appropriate sections of TEF3202 to be completed



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Figure 2 – TEF 3202 completion

10 Additional checks required to determine if a rough ride report could be caused by structural support problems

Carry out additional checks to determine if the track support (bridge or embankment) could have been undermined.

Tell-tale signs to look out for include:

- *flood water at the bottom of embankments, physical indicators of ground movement such as leaning trees, scars or bulges in the embankment;*
- *high, possibly fast moving, water under bridges carrying the railway over water.*

These checks shall be carried out even if a track fault has been found.

NOTE: *The root cause of the fault might be the result of unstable ground or structural condition.*

If any conditions indicating that the track support could have been undermined are observed, the Authorised Person shall contact Control and request the attendance of the on-call Structures or Earthworks Engineer.

The line shall remain blocked until the on-call Structures or Earthworks Engineer confirms that the track support has not been compromised and that the safety of the line is not affected.

11 Additional requirements when debris on the line has come from cutting slopes or overhead structures

If the debris on the line is from a cutting slope or an overhead structure (bridge/tunnel), the Authorised Person shall contact Control and request the attendance of the on-call Structures or Earthworks Engineer.

The line shall remain blocked until the on-call Structures or Earthworks Engineer confirms that no further debris will fall and that the safety of the line is not affected.

12 Condition of track not suitable for current or higher line speed

On inspection, the line might not be in a satisfactory condition.

The inspection might result in one of the following conclusions:

a) it is not safe to reopen the line at the permanent line speed, or planned opening speed (TSR), and the site requires the imposition of an emergency speed restriction (ESR) before being opened to traffic; or

b) it is not safe for the line to be reopened at the planned opening line speed without further work being undertaken; or

c) it is not safe for the line to open (or remain open) at the current temporary or permanent line speed without additional urgent remedial work being undertaken.

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If any of these conclusions are reached, apply an ESR (as required) and provide details of the additional work undertaken or required on the inspection form.

Carry out a new inspection when the work has been completed. Complete a new inspection form for each inspection undertaken.

13 Records

Retain all records produced for a minimum of three years.

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Appendix A - Safety Critical Work (as described in the ROGS Regulations)

- The installation, examination and testing of new track, components and structures supporting the permanent way;
- The maintenance, repair, reconditioning, examination, testing and alteration of the track, components and structures supporting the permanent way;
- Authorising the use of the transport system for reduced speed (ESR/TSR) or normal (line) speed running;
- The operation of an on-track machine (OTM) to maintain the permanent way (that) affects the guidance and support for vehicles;
- Operating a vehicle on the permanent way to carry out maintenance on the permanent way. This includes the use of rail, road/rail, road wheeled or tracked vehicles;
- Track inspection, carried out at regular intervals, where defects might be found which require trains to operate at reduced speed, or be stopped (to allow urgent maintenance work to be undertaken);
- Practical training, supervision of practical training, coaching and assessment of the competence of individuals carrying
- out safety critical tasks;
  - The people carrying out practical training, supervision of the practical training, coaching and competence assessment are (also) covered by this Regulation.

Appendix B - Other related documents

NR/L3/OPS/045/3.07	NATIONAL OPERATING PROCEDURES Signalling system failures, lineside safety equipment failures, track defects and receiving and responding to RT3185 forms
NR/SP/CTM/017	Competency and training in Civil Engineering
GERT8000 – M3	Managing incidents, floods and snow
GERT8000 – TS2	Regulations for train signalling by the track circuit block system. Regulation 4 – Obstruction on the line

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Expiry date:	10 July 2020

Emergency change: NR/BS/LI/440

Standard/control document affected: NR/L2/TRK/001 (Issue 15), *Inspection and Maintenance of Permanent Way*

The affected standard/control document will revert back after the 10th July 2020

For further information contact: Tara Scott, Professional Head of Track (Acting), 07825 259412

1 Reason for issue

This Emergency Change is being issued as a result of COVID-19 to allow limited and controlled changes to specific Track maintenance standards for a period of 3 months to allow the continuation of railway operations in the event of unavailability of maintenance staff.

2 Scope

This Emergency Change applies to the Route Asset Managers [Track] acting with the delegated authority of the Professional Head of Track to permit variations to red clauses in NR/L2/TRK/001 (Inspection and Maintenance of Permanent Way):

- Eric Thomson
- Chris Bibby
- Craig Green
- Dave Webb
- Darren Ellis
- Steve O'Brien
- Nigel Wilson
- Roger Griffiths
- Andrew Bartlett
- Steve Pearson
- Paul Meads
- Colum Cavanagh
- Phil Jeyes
- Andy Jones

The red requirements listed in clause 3 of this emergency change are changed to amber RAG status until the expiry date of this emergency change and variations can be made but only after suitable risk assessment and as documented in COVID-19 Contingency Plan, NR/L3/MTC/CP007 and NR/L2/CSG/STP001.

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3 Changes

The red RAG status of the requirements in the table of this clause is changed to amber for the duration of this emergency change. Variation is permitted if undertaken in accordance with NR/L3/MTC/CP007 and NR/L2/CSG/STP001.

Module	**Clause/sub-clause**	**Requirement**
NR/L2/TRK/001/mod02	3.3	Except where specifically permitted elsewhere in this standard, track inspections shall be undertaken on foot, walking within the length of the sleepers. A maximum of two tracks shall be inspected at one time.
NR/L2/TRK/001/mod02	6.6	A Section Manager track inspection which is being carried out as a substitute for a basic visual track inspection, shall be undertaken in accordance with the Track Patrolling Diagram.
NR/L2/TRK/001/mod04	6.1	Welded joints within CWR shall be formed using an approved flash-butt or aluminothermic welding process.
NR/L2/TRK/001/mod04	7	Where rails with differential sidewear are joined together by a welded joint or a fishplated joint, the step in the running edge shall be blended in.
NR/L2/TRK/001/mod13	10	The line shall remain blocked until the on-call Structures or Earthworks Engineer confirms that the track support has not been compromised and that the safety of the line is not affected.
NR/L2/TRK/001/mod13	11	The line shall remain blocked until the on-call Structures or Earthworks Engineer confirms that no further debris will fall and that the safety of the line is not affected.
NR/L2/TRK/001/mod16	5.2	The switch rail tip shall be adequately supported on the baseplate.

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Approval of Standard and Control Document Owner

Approved by:



Tara Scott, Professional Head of Track

Approval of Standards and Controls Management Team

Approved for publication by:



John Winnifrith, Senior Standards & Controls Specialist

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4 Recipients

Name	**Post**
Eric Thomson	Route Asset Manager [Track]
Chris Bibby	Route Asset Manager [Track]
Craig Green	Route Asset Manager [Track]
Dave Webb	Route Asset Manager [Track]
Darren Ellis	Route Asset Manager [Track]
Steve O'Brien	Route Asset Manager [Track]
Nigel Wilson	Route Asset Manager [Track]
Roger Griffiths	Route Asset Manager [Track]
Andrew Bartlett	Route Asset Manager [Track]
Steve Pearson	Route Asset Manager [Track]
Paul Meads	Route Asset Manager [Track]
Colum Cavanagh	Route Asset Manager [Track]
Phil Jeyes	Route Asset Manager [Track]
Andy Jones	Route Asset Manager [Track]

5 Details of briefing or cascade communication process

Route Asset Managers [Track] have already been briefed. Directors of Engineering & Asset Management will be briefed by the Professional Head of Track.

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