



Certificate of Derogation from a Railway Group Standard

(in accordance with part 6 of the Railway Group Standards Code)

1. Type of deviation

Derogation

Deviation Number: 12/183/DGN

2. Details of applicant:

Network Rail (Investment Projects),
Desk 054, Elder Gate, Milton Keynes, MK9 1EN

The Quadrant: MK, Furzton, Floor 3,

3. Your reference number:

Tracker No. 10912

4. Status of applicant:

Infrastructure Manager, RSSB Member

5. Title of certificate:

Signal BH58 Overlap Length.

6a. Details of Railway Group Standard (RGS):

RGS Number:	Issue No:	Issue Date:	Title:
GK/RT0064	One	December 2000	Provision of Overlaps, Flank Protection and Trapping

6b. RGS clause(s):

4.2.1

6c. RGS clause requirements:

"4.2.1

An overlap provided to meet the requirements of section 4.1 for a route from one main stop signal to the next shall have a minimum length which is in accordance with Table 1, except where permitted by sections 4.3 and 4.4.

Caution Signal(s)	Stop Signal	Overlap Length
Colour Light	Colour Light	180m
Colour Light	Semaphore	180m *
Semaphore	Semaphore	400m *
Fixed	Stop board	180m

Table 1: Full Overlap Lengths

* In other than Track Circuit Block (TCB) areas the quoted overlap lengths are modified by the Regulations for Train Signalling GO/RT3062 for working during fog or falling snow."

7. Scope of deviation:

BH58 Signal, Up Slow Line (LEC4) protecting Basford Hall Junction.

8. Impacts of complying with the current RGS requirement:

The application of this derogation is against an existing deficiency which has been submitted as a result of a change in speed. This deviation is for the future linespeed increase from 75 mph to 100 mph.

This deviation is also to be extended to cater for the future linespeed increase from 75 mph to 100 mph.

Compliance would require relocation of the Insulated Rail Joints and associated track circuit alterations at a cost of approximately £40k, with very little overall safety improvement.

No work is currently planned in the area as part of linespeed improvements.

9. Proposed alternative actions:

The current position of BH58 overlap IRJ is 177.4 m from the signal, which is 2.6 m deficient according to the GK/RT0064.

The project is proposing to retain the overlap position for the junction signal at 177.4 m with the linespeed increased to 100 mph.

Note: the cost of replacing the six-hole glued Insulated Rail Joints (IRJ) including alterations to track circuit tail cables etc. to make the overlap compliant has been quoted as circa £40k.

This linespeed increase scheme does not currently require any track circuit alterations as the scope is limited to provision of banner repeating signals and additional TPWS. The minimum cost, relocating the IRJ's at circa £40k is still deemed disproportionate to the risk for the distance of non-compliance (2.6 m or 1.4% deficient).

10. Impacts of the alternative actions:

This is an existing deficiency for the current permissible linespeed of 75 mph.

The safe overrun distance (SOD) is 260 m, which negates the overlap being at 177.4 m as a train is more likely to be using the junction that standing ahead of BH58 under the current service pattern.

BH58 signal has TPWS+ and was deemed ALARP for existing and higher line speed by DA committee upon review of this signal at DA workshop held for the proposed line speed increase. No further mitigation measures were deemed necessary.

The signal has good sighting, with available reading distance in excess of 500 m with a required reading distance of 357 m at the proposed higher linespeed.

11. What other options have been considered?

Relocating the IRJ or signal was ruled out on cost grounds given that ALARP status granted during DA process for the current arrangements.

12. Consultation with affected parties

The proposal has been accepted by Virgin, London Midland and DBS as part of the project consultation and signal sighting/SORA process.

13. Additional actions/observations:

Upon receipt, the applicant is required to identify affected, interfacing parties and copy this certificate, together with supporting information, to those parties.

Attachments:

- Risk Solution's Signal Overrun Risk Assessment Report Ref. BS0044/007/D141 of June 2012: URS Madeley Slow Lines – Line Speed Improvements.

14. Method of elimination:

N/A

15. Start and end date:

N/A

16. Signature of applicant:

(Signals), Head of Signal Engineering

Date of application:

27/09/2012

17. Lead Standards Committee details:

Name of Committee:

Control Command and Signalling

Date of meeting

08/11/2012

Minute reference:

12/CCS/11/228

Authorised by:

Signed by Jeff Allan on 27/11/2012

Date of Authorisation:

27/11/2012

Jeff Allan

Head of Delivery, Control Command & Signalling, and Energy