

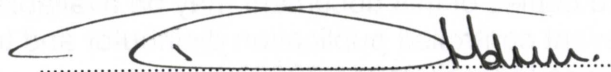
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Level 2

Prevention and Mitigation of Overruns – Risk Assessment of Signals

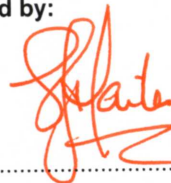
Endorsement and Authorisation

Endorsed by:



R. Bassett, Head of Operations Principles & Standards

Authorised by:



S Hailes, Head of Signal Engineering

Accepted for issue by:



M McManus, National Standards Manager

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Issue 1	April 2003	New Document
Issue 2	August 2008	Updated to reflect Phase 2A / Engineering reorganisation responsibility change, no technical changes, no technical changes.

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1. Purpose

To provide guidance to users of Company Procedure [NR/L2/SIG/14201](#) Prevention and Mitigation of Overruns - Risk Assessment of Signals.

This guidance is not mandatory but it represents current good practice.

2. Scope

This guidance note applies to anyone given the responsibility by Network Rail for conducting overrun risk assessments of railway signals forming part of track layouts and fixed block signalling systems on Network Rail Controlled Infrastructure. They may be either Network Rail employees or appointed contractors/consultants acting on behalf of Network Rail.

It provides guidance for the assessment of safety risk: -

- During the design of new/altered layouts and fixed block signalling systems on Network Rail Controlled Infrastructure.
- Arising as a result of the operation of layouts and signalling.
- Arising from alterations to the layouts and/or signalling

3. Reference Documentation

[GI/RT 7006](#) Prevention and Mitigation of Overruns - Risk Assessment

[GI/GN 7606](#) Guidance Note: Prevention and Mitigation of Overruns - Risk Assessment

[GO/RT 3252](#) Signals Passed at Danger

[NR/L2/SIG/14201](#) Prevention and Mitigation of Overruns Risk Assessment of Signals

[NR/L2/OPS/031](#) Risk Assessment & Briefing of Timetable Change

ACOP L2I to MHSWR 1999

"Yellow Book" Engineering Safety Management Fundamentals and Guidance

Definitions

Infrastructure Change Any change to Network Rail Controlled Infrastructure that will result in a new or modified track layout and signalling

Steady State The operation of a track layout and signalling on a day to day basis.

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Signal Assessment Tool	A quantitative method of providing an assessment of risk due to overrunning a specific signal protecting a junction
Detailed Assessment	A qualitative technique using structured expert judgement (SEJ) in a facilitated workshop.
Layout Risk Method	A detailed quantitative software process for the assessment of risk at signals within railway layouts.
Suitable & Sufficient	"The risk assessment should identify the risks arising from or in connection with the work. The level of detail in a risk assessment should be proportionate to the risk. Once the risks are assessed and taken into account, insignificant risk can usually be ignored, as can risks arising from routine activities associated with life in general, unless the work activity compounds or significantly alters those risks. The level of risk arising from the work activity should determine the degree of sophistication of the risk assessment." ACOP L21 to MHSWR 1999 section 13 (a) page 6.

Abbreviations

ALARP	As Low as Reasonably Practicable
DA	Detailed Assessment
LRM	Layout Risk Method
SAT	A quantitative Signal Assessment Tool
SEJ	Structured Expert Judgement
SPAD	Signal Passed at Danger
TPWS	Train Protection and Warning System