

Ref:	NR/L2/ERG/003
Issue:	5
Date:	4 th June 2011
Compliance date:	3 rd September 2011

Level 2

Management of fatigue: Control of working hours for staff undertaking safety critical work

Endorsement and Authorisation

Endorsed by:



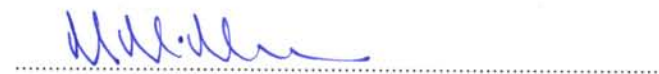
Fiona Kenvyn, Senior Ergonomist, Working Group Chair

Authorised by:



Theresa Clarke, Head of Ergonomics, Steering Group Chair

Accepted for issue by:



M. McManus, National Standards Manager

This document is the property of Network Rail. It shall not be reproduced in whole or part nor disclosed to a third party without the written permission of Network Rail.

© Copyright 2011 Network Rail.

Uncontrolled copy once printed from its electronic source.

Published and Issued by Network Rail, Kings Place, 90 York Way, London. N1 9AG.



Documents

Document Sharing Hub

Ref:	NR/L2/ERG/003
Issue:	5
Date:	4 th June 2011
Compliance date:	3 rd September 2011

Issue record

Issue	Date	Comments
1	March 1997	New standard
2	August 2002	Additional guidance
3	February 2005	Reformatted to migrate into the new Network Rail Standards framework
4	April 2006	Revised to reflect Network Rail reorganisation. Included an extension of the scope to incorporate the Maintenance function, and clarification of responsibilities for managing fatigue related to on-call. Specific responsibilities included for managing employees who are fatigued and providing information about fatigue risk and management. A new Exceedance Assessment and Authority form was included. The standard also changed ownership.
5	June 2011	Revision to reflect requirements of Rail and Other Guided Transport Systems (Safety) Regulations 2006, with a change in focus from working hours to management of fatigue. Changes to working time limits.

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 3rd September 2011.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 3 (Option Selection) to continue to comply with the Issue of any relevant Network Rail Standards current when GRIP Stage 3 was completed and not to comply with requirements contained herein, unless stipulated otherwise in the scope of this standard.

Reference documentation

Legislation:	Railways and Other Guided Transport Systems (Safety) Regulations (2006).
Company Standards, Processes and Guidance:	NR/L3/CPR/302 Supplier Qualification – Core Requirements NR/L3/INF/02226 Corporate Records Retention Schedule NR/SP/ASR/036 Network Rail Assurance Framework E-learning CD – Network Rail Fatigue Management e-learning programme , Version 2, February 2011
Other:	Spencer, M.B., Robertson, K.A. & Folkard, S (2006). <i>The development of a fatigue/risk index for shiftworkers</i> . Health and Safety Executive Report No. 446. London: HSE Books.

Ref:	NR/L2/ERG/003
Issue:	5
Date:	4 th June 2011
Compliance date:	3 rd September 2011

Disclaimer

In issuing this document for its stated purpose, Network Rail makes no warranties, express or implied, that compliance with all or any documents it issues is sufficient on its own to ensure safe systems of work or operation. Users are reminded of their own duties under health and safety legislation.

Supply

Copies of documents are available electronically, within Network Rail's organisation. Hard copies of this document may be available to Network Rail people on request to the relevant controlled publication distributor. Other organisations may obtain copies of this document from IHS. Tel: 01344 328039.

Ref:	NR/L2/ERG/003
Issue:	5
Date:	4 th June 2011
Compliance date:	3 rd September 2011

Contents

1 Purpose	5
2 Scope	5
3 Roles and responsibilities	5
4 Definitions	6
5 Working time limits	9
6 Calculation of hours of work	9
Table 1 – Hours of work criteria	9
7 Identifying those workers affected by these requirements	9
8 Design of working patterns	10
9 Limiting exceedances	11
10 Monitoring and reporting fatigue, working hours and exceedances	12
11 Action when workers are fatigued	13
12 Education	13
13 Contract Management	13
14 Audit and Assurance	14
15 Review of arrangements for managing fatigue and working hours	14
Appendix A : Risk assessment for exceedances and short notice shift changes	15
Appendix B : Exceedance Authorisation Form (Sample)	17

.....

Ref:	NR/L2/ERG/003
Issue:	5
Date:	4 th June 2011
Compliance date:	3 rd September 2011

1 Purpose

The purpose of this standard is to reduce the risks to health and safety that are associated with working patterns, shift work and excessive working hours.

This standard also demonstrates the means by which Network Rail will comply with Regulation 25 of the Rail and Other Guided Transport Systems (Safety) Regulations 2006. The regulation states that:

1. *“Every controller of safety critical work shall have in place arrangements to ensure, so far as is reasonably practicable, that a safety critical worker under his management, supervision or control does not carry out safety critical work in circumstances where he is so fatigued or where he would be liable to become so fatigued that his health and safety or the health and safety of other persons on a transport system could be significantly affected.*
2. *The arrangements in paragraph (1) shall be reviewed by the controller of safety critical work where he has reason to doubt the effectiveness of those arrangements.”*

It forms one aspect of our overall management of fatigue.

2 Scope

This standard outlines the requirements for managing fatigue and working hours. It applies to all Network Rail employees who undertake safety critical work, and to those suppliers whose employees undertake safety critical work on Network Rail controlled infrastructure.

Specific requirements are set out for line managers or other identified roles who:

- Have responsibility for the rostering and/or management of staff who undertake safety critical work, and/or
- Are responsible for arranging, placing, controlling and monitoring of contracts which involve undertaking safety critical work on Network Rail controlled infrastructure.

The scope of this standard includes controls for:

- Working hours
- Exceedances of working time limits
- Design and risk assessment of working patterns
- Management of fatigue
- Monitoring and review of arrangements for managing fatigue and working hours.

3 Roles and responsibilities

Controller of Safety Critical Work

Any person controlling the carrying out of safety critical work on a transport system or in relation to a vehicle used on a transport system.

Ref:	NR/L2/ERG/003
Issue:	5
Date:	4 th June 2011
Compliance date:	3 rd September 2011

Functional Head

The senior management post within a Function (e.g. Function Director/Head). Responsible for implementing the requirements of this standard across their Function and monitoring the efficacy of the arrangements in place for managing fatigue and working hours.

Line Manager

A post that is directly responsible for the management of employees undertaking safety critical work, and for the arrangements in place to manage their fatigue and working hours. This may also include the Network Rail employee responsible for the monitoring of Contractor resources.

4 Definitions

Exceedance

Exceeding an identified working time limit.

Exceptional Circumstances

Where working beyond the identified processes and arrangements for managing fatigue is necessary in order to avoid or reduce:

- risks to the health and safety of persons on the railway
- significant disruption to services

and it is not reasonably practicable to take alternative steps.

NOTE Such circumstances would include:

- *extreme weather*
- *equipment failure*
- *accident or other serious incident*
- *shortage of staff that is unforeseeable (e.g. sudden illness) and which would cause significant operational disruption (e.g. closing a signal box, possession overrun).*

The following would not be considered acceptable reasons for exceeding identified processes for managing fatigue:

- *the existence of long-standing job vacancies,*
- *planned organisational changes,*
- *planned training or safety briefings,*
- *extended blocks of maintenance work (e.g. blockades) that affect the number of staff undertaking safety critical work.*

Fatigue

A state of perceived weariness resulting from physical or mental exhaustion that can result from prolonged working, heavy workload, insufficient rest and inadequate sleep.

NOTE Shift work is one cause of fatigue. Fatigue has been identified as a causal factor in incidents and accidents, largely because it can reduce vigilance and alertness, and lead to an increase in the likelihood of error and impaired decision making.