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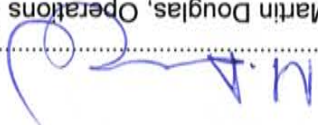
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| Ref:             | NR/L3/NDS/006     |
| Issue:           | 1                 |
| Date:            | 03 September 2011 |
| Compliance date: | 03 December 2011  |

## Level 3

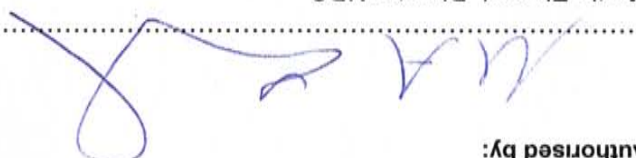
NDS process for the management of fatigue and working hours for employees undertaking safety critical work

### Endorsement and Authorisation

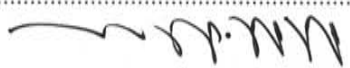
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|                  |                   |
|------------------|-------------------|
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## Issue record

| Issue | Date     | Comments    |
|-------|----------|-------------|
| 1     | Dec 2011 | First Issue |

## Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 03 December 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

|                    |                                                                                    |
|--------------------|------------------------------------------------------------------------------------|
| NR/L2/ERG/003      | Management of fatigue and working hours for staff undertaking safety critical work |
| NR/GN/INI/001      | Guidance on the management of door to door work and travel time, December 2008     |
| Legislation        | Railways and Other Guided Transport Systems (Safety) Regulations (2006).           |
| NR/L3/CPR/302      | Supplier qualification – core requirements                                         |
| NR/L3/INF/02226    | Corporate records retention schedule                                               |
| NR/SP/ASR/036      | Network Rail assurance framework                                                   |
| NR/L3/NDS/006/F013 | NDS exceedance assessment and request form                                         |
| e-Learning CD      | Fatigue Management e-Learning CD ROM                                               |

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|                  |                          |
|------------------|--------------------------|
| Ref:             | <b>NR/L3/NDS/006</b>     |
| Issue:           | <b>1</b>                 |
| Date:            | <b>03 September 2011</b> |
| Compliance date: | <b>03 December 2011</b>  |

## Contents

|                                                                        |    |
|------------------------------------------------------------------------|----|
| 1 Purpose                                                              | 4  |
| 2 Scope                                                                | 4  |
| 3 Roles and responsibilities                                           | 5  |
| 4 Definitions                                                          | 7  |
| 5 Working time limits                                                  | 10 |
| 6 Requirements for managing fatigue and excessive working hours        | 10 |
| 7 Recording and approval of working hours                              | 17 |
| 8 Action when workers are fatigued                                     | 18 |
| 9 Review of fatigue, working hours and Exceedances                     | 19 |
| Appendix A : Exceedance Risk Assessment Guide                          | 22 |
| Appendix B : Roster Creation Tool                                      | 23 |
|                                                                        | 24 |
| Figure 1 – Flow chart depicting process for unplanned exceedances      | 21 |
| Figure B.1 – Roster creation summary view                              | 23 |
| Figure B.2 – Individual roster view                                    | 24 |
| Table 1 – Responsibilities for review of working hours and exceedances | 19 |

|                  |                   |
|------------------|-------------------|
| Ref:             | NR/L3/NDS/006     |
| Issue:           | 1                 |
| Date:            | 03 September 2011 |
| Compliance date: | 03 December 2011  |

## 1 Purpose

This standard defines the requirements for managing fatigue and working hours for National Delivery Service (NDS) employees, and those employed under contract by NDS, who undertake safety critical work. Its purpose 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.”*

## 2 Scope

This standard outlines the requirements for managing fatigue and working hours. It applies to all NDS 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 and rosters
- Management of fatigue
- Monitoring and review of arrangements for managing fatigue and working hours.

|                  |                   |
|------------------|-------------------|
| Ref:             | NR/L3/NDS/006     |
| Issue:           | 1                 |
| Date:            | 03 September 2011 |
| Compliance date: | 03 December 2011  |

### 3 Roles and responsibilities

| RACI DETAILS | Resources    |                   |                  |                 |                            |  |
|--------------|--------------|-------------------|------------------|-----------------|----------------------------|--|
|              | Line Manager | AMCC Duty Manager | Nominated Person | Fleet Engineers | NDS administration support |  |
| Process Task |              |                   |                  |                 |                            |  |
| 6.1          | A/R          |                   |                  |                 |                            |  |
| 6.1.1        | A/R          |                   |                  | R               |                            |  |
| 6.2          | R            | R                 | R                | R               | R                          |  |
| 6.4.1        | I            | I                 | I                | I               |                            |  |
| 6.5          | A/R          |                   |                  |                 |                            |  |
| 6.5.3        | I            |                   |                  |                 |                            |  |
| 6.5.5        | I            |                   |                  |                 |                            |  |
| 6.5.6        | I            |                   |                  |                 |                            |  |
| 6.5.7        | A/R          |                   |                  |                 |                            |  |
| 6.5.8        | I            |                   |                  |                 | A                          |  |
| 6.6.2        | A/R          |                   |                  |                 |                            |  |
| 6.6.3        |              | R                 | R                |                 |                            |  |
| 6.7.1        | A/R          |                   |                  |                 |                            |  |
| 6.7.2        | A/R          | R                 |                  |                 |                            |  |
| 6.7.3        |              | A/R               |                  |                 | R                          |  |
| 6.7.4        | A/R          |                   |                  |                 |                            |  |
| 6.8.1        | I            | I                 | I                | I               | I                          |  |
| 6.8.2        | R            |                   | A/R              |                 |                            |  |
| 6.8.4        | R            | A/R               | R                | I               |                            |  |
| 6.8.5        | R            | R                 | A/R              |                 |                            |  |
| 6.8.6        | A/R          |                   |                  |                 |                            |  |
| 6.8.7        | A/R          |                   |                  |                 |                            |  |
| 6.8.8        |              | R                 | R                |                 |                            |  |
| 6.8.10       | R            | R                 | A/R              |                 |                            |  |
| 6.8.11       | R            | R                 | A/R              |                 |                            |  |

|                  |                   |
|------------------|-------------------|
| Ref:             | NR/L3/NDS/006     |
| Issue:           | 1                 |
| Date:            | 03 September 2011 |
| Compliance date: | 03 December 2011  |

| RACI DETAILS | Resources    |                   |                  |                 |                            |  |
|--------------|--------------|-------------------|------------------|-----------------|----------------------------|--|
|              | Line Manager | AMCC Duty Manager | Nominated Person | Fleet Engineers | NDS administration support |  |
| Process Task |              |                   |                  |                 |                            |  |
| 6.8.12       | A/R          |                   |                  |                 |                            |  |
| 6.8.13       | A/R          |                   |                  |                 |                            |  |
| 6.8.14       | A/R          |                   |                  |                 |                            |  |
| 6.9.1        | A/R          |                   | R                |                 | I                          |  |
| 6.9.2        | A/R          |                   |                  |                 |                            |  |
| 6.9.5        | R            |                   |                  |                 |                            |  |
| 6.9.7        | R            | R                 | R                | I               |                            |  |
| 8.1          | R            |                   |                  |                 |                            |  |
| 9.1          | A/R          |                   |                  |                 |                            |  |
| 9.2          | A/R          |                   |                  |                 |                            |  |
|              |              |                   |                  |                 |                            |  |

RACI is a means of linking process steps to roles as follows:

- **R** – Responsible: the individual(s) who perform an activity – responsible for action/implementation – although usually only one, Rs can be shared
- **A** – Accountable: the individual who is ultimately accountable including yes/no decision and power of veto – only one 'A' can be assigned
- **C** – Consulted: the individual(s) to be consulted prior to a final decision being made or action taken – two-way communication.
- **I** – Informed: the individual(s) who need to be informed after a decision is made or action is taken – one-way communication.

|                  |                   |
|------------------|-------------------|
| Ref:             | NR/L3/NDS/006     |
| Issue:           | 1                 |
| Date:            | 03 September 2011 |
| Compliance date: | 03 December 2011  |

## 4 Definitions

### 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.

### Exceedance

Where hours/days are worked over the working time limits defined in this procedure. Where the working time limit is defined in terms of number of hours/shifts, each shift or hour over the limit will be counted as a separate exceedance (e.g. if one shift were 13.5 hours then 1.5 hours would be recorded).

- A **planned exceedance** occurs when an individual or team are aware prior to commencing a shift that their hours of work will take them beyond the working time limits. This may occur when an individual works more than 13 consecutive shifts, or more than 72 hours in a week, for example.
- An **unplanned exceedance** occurs when an individual or team are required to work beyond the working time limits as a result of an unplanned event or incident. This may occur when an individual works more than 12 hours in a shift.

### Exceptional Circumstances

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

- 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 (e.g. by providing relief staff), such circumstances would include:
  - Extreme weather conditions,
  - Equipment failure,
  - Accident or serious incident,
  - Shortage of staff which is not foreseeable and which would cause significant operational disruption (i.e. possession overruns).

*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.*

|                  |                   |
|------------------|-------------------|
| Ref:             | NR/L3/NDS/006     |
| Issue:           | 1                 |
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## 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 1 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.*

## Fatigue and Risk Index (FRI)

A tool that evaluates the pattern of shifts in a roster to identify risks of fatigue or error as a result of how those shifts were scheduled. Also accounts for additional factors that can impact fatigue including travelling time, workload, attention and arrangement of rest breaks.

*NOTE 2 The FRI is available for download from the Health and Safety Executive website or via Network Rail's fatigue management e-learning programme.*

## 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.

## Hours Worked/Hours of Work

Actual (not rostered) hours of work include any overtime, any rest days worked, paid travelling/walking time and paid meal/rest breaks. See also definition of on call.

*NOTE 3 Work not classified as safety critical, but which is undertaken by staff during the same shift as safety critical work, is considered as safety critical work for the purposes of calculating hours of work.*

*NOTE 4 Attendance at a residential course, any other training course or other official Network Rail business away from the normal place of work constitutes a working day and is included when continuous days worked are being calculated.*

*NOTE 5 Where staff will commence duty at a remote location, the travelling time is calculated from leaving their rest location to the location where their work commences.*

*NOTE 6 'Wash up' time or 'handover' time incurred by staff is included. Any kind of paid or unpaid leave (e.g. sick leave, annual leave) is excluded.*

## 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 supplier resources.

## Nominated Person

Any person nominated by the Line Manager who is considered competent to authorise an exceedance.

*Note 7 This is usually the On Call Manager. In locations where a formal arrangement is in place utilising Control to document risk assessments for authorisation of exceedances, a member of Control staff may be considered as a Nominated Person*