

Revised ORR Guidance on Managing Rail Staff Fatigue

Since the publication of our original guidance “*Managing Fatigue in Safety Critical Work*” in 2006, ORR has received various suggestions on improving its content and usefulness, and our experience in applying the guidance has identified areas where improvements were needed to help rail organisations control fatigue risks. There have also been developments in fatigue management approaches in comparable industries which could and should be more widely adopted in the rail industry.

ORR has incorporated many of these suggestions and developments into our revised guidance “*Managing Rail Staff Fatigue*”, which we believe will improve rail organisations’ ability to control, so far as reasonably practicable, risks from staff fatigue. Some key points to note are:

- For staff carrying out **ROGS safety critical work**,
 - the nine-stage approach adopted in the 2006 guidance is retained, to avoid any need for wholesale change by organisations who have already devised their “safety critical work” fatigue controls following this ROGS nine-stage format. A small number of additional guidelines have been added, reflecting recent research. For instance, recommending that fatigue controls are reviewed where weekly hours exceed 55, in line with recent findings, rather than the current figure of 72 hours.
- Significantly however, the new guidance makes clear that **risks from fatigue are not confined to “ROGS safety critical” work**, and provides practical guidance on the elements of an over-arching system for managing fatigue for all rail employers whose staff may be exposed to, or create, significant fatigue risk, irrespective of whether they do ROGS safety critical work.
 - The guidance stresses that a **proportionate approach** is needed – a simple system where fatigue risks are low, but a more robust system where fatigue risks are higher.
 - The need for such a “fatigue risk management” approach is implicit in existing health and safety legislation including the Health and Safety at Work etc Act and the Management of Health and Safety at Work Regulations – the new guidance merely provides **practical advice on what responsible employers should already be doing**.
 - The revised guidance makes the link between the above existing legal requirements and the “**POPMAR**” **risk management cycle** outlined since 1991 in HSE’s guidance “*Successful Health and Safety Management*”. It provides suggestions on reducing risks from fatigue under the POPMAR headings of Policy; Organisational arrangements; Planning & implementation; Monitoring; Audit and Review.
 - A checklist provides a possible structure to help employers assess the adequacy of their existing fatigue controls.

The effect of the above points is that the updated ROGS “safety critical work” fatigue guidance now forms just one part of a more comprehensive description of key elements in an over-arching fatigue risk management system.

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Appendix

Fatigue has been cited as a significant contributory factor in serious high profile accidents in a wide range of industries in recent years. Examples include nuclear power generation at Three Mile Island and Chernobyl, chemical manufacturing at Bhopal, the grounding of the Exxon Valdez, the Challenger space shuttle disaster and the rail crash at Clapham Junction (Mittler et al, 1988; Dinges, 1995; Colten et al, 2006).

It was estimated in 2002 that sleep-related accidents cost UK companies some £115-240 million per year (Folkard, 2000). Fatigue makes expensive mistakes more likely, reduces productivity and morale, and increases absenteeism (DfT Report 120, 2010; Dawson et al, 2000). There are sound financial, as well as legal and moral, reasons to manage fatigue properly.

Rail safety incidents where fatigue is believed to have contributed significantly continue to occur. The Rail Accident Investigation Branch (RAIB) estimates that between March 2000 and November 2010, fatigue was a factor in 111 rail industry accidents and incidents for which shift information was available (RAIB, Shap report 2011). ORR continues to encounter poor understanding of fatigue controls amongst duty holders, and continues to receive many queries from rail employers, staff, trade unions and others about managing fatigue risks. In particular:

- Some organisations appear to view fatigue as being relevant only to staff carrying out “safety critical” work as defined in ROGS, rather than being relevant to a much wider group of staff who fall outside the strict ROGS definition but, nevertheless, could be subject to significant fatigue risk from their work. Fatigue may place staff at extra risk when working with or near moving machinery or plant, working at height or doing electrical work. They may endanger themselves and other road users if they drive home after work whilst excessively tired.
- There appears to be excessive reliance on using fatigue assessment tools such as the Health and Safety Executive (HSE) Fatigue and Risk Index in isolation as simplistic, binary tools to deem working patterns as either “safe” or “unsafe”, without adequate regard for maximising the incorporation of good fatigue management practices from the outset, or taking into account employees’ real-world experiences of fatigue

There have been significant developments in fatigue risk management arrangements in other countries and industries (Transport Canada, 2007; DfT Reports 110 and 120, 2010; U.S. Dept of Transportation Federal Aviation Administration 2010; RSSB 2010). It has become apparent that many duty holders do not understand the full range of measures necessary to manage risks from fatigue. Our revised guidance therefore provides more detailed advice on how fatigue risk may be managed, and is intended to provide answers to most of the fatigue questions our staff are regularly asked.

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