Code of Practice for Safety Related Defect Reporting for OTP, Plant and Equipment
Document revision history

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Reason for change</th>
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<tbody>
<tr>
<td>1</td>
<td>Feb 02</td>
<td>First issue (now withdrawn).</td>
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<tr>
<td>2</td>
<td>Sep 04</td>
<td>Review and update of plant suppliers list (now withdrawn).</td>
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<tr>
<td>3</td>
<td>Jun 06</td>
<td>Review and update of plant suppliers list and also to change distribution of NIRs by Network Rail (now withdrawn).</td>
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<tr>
<td>4</td>
<td>Apr 10</td>
<td>Review and update in line with GE/RT8250 Issue 2. All plant suppliers report defects to Network Rail and email address for Network Rail contact added.</td>
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<tr>
<td>5</td>
<td>May 12</td>
<td>Additional recommendation added concerning defects found during maintenance and servicing to be reported.</td>
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<tr>
<td>6</td>
<td>Sep 14</td>
<td>Mention of plant operating licence holders removed, and good practice to voluntarily stand down machines added.</td>
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Background

A sub-group of the M&EE Networking Group have looked at the arrangements for defect reporting by the rail infrastructure plant industry sector in accordance with Group Standard GE/RT8250 issue two. The M&EE Networking Group recommend this COP as good practice for the industry.

M&EE COPs are produced for the benefit of any industry partner who wishes to follow the good practice on any railway infrastructure. Where an infrastructure manager has mandated their own comparable requirements, the more onerous requirements should be followed as a minimum for work on their managed infrastructure.

The M&EE Networking Group makes no warranties, express or implied, that compliance with this document 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.

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Sign off
The M&EE Networking Group agreed and signed off this Code of Practice on 17 September 2014 and published 6 December 2014.

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London Underground  T Jipson  Principal Plant Engineer
C Spencer  R Sharp  Director of Safety
Network Rail  P Conway  Professional Head of Plant & T+RS
Rail Plant Association  D Matthews  Management Committee
RSSB  M James  Principal Plant Engineer
VolkerRail  J Pendle  Engineering Director

Purpose
This Code of Practice details the systems to have in place so that all safety related defects are reported and that other reported defects are checked in accordance with GE/RT8250.

GE/RT8250 issue two advises that the national reporting system should be used for plant and equipment.

Scope
This Code of Practice concerns all safety related defects on OTP and plant & equipment that could be used on any railway infrastructure.
Definitions

NIR
National incident report, a report, made in accordance with GE/RT8250, of an urgent high risk defect made using NIR-OL.

NIR-OL
A web-based application used to initiate, disseminate and manage NIRs.
The web address of NIR-OL is http://www.nir-online.net/.

OTP
On-track plant, vehicles with rail wheels capable of running on railway track, limited by their engineering acceptance to running within a possession only. These are split into three main groups: rail mounted maintenance machines (RMMMs), road rail vehicles (RRVs) and trailers.
1 Procedure

1.1 Defects found

1.1.1 If a plant supplier that does not have 'write ability' to NIR-OL finds a defect on any safety system (Appendix A) the information should be passed to Network Rail using the form shown in Appendix B, by e-mail. Network Rail should decide whether to initiate an NIR or not. The current e-mail address is: PlantNIRs@networkrail.co.uk.

1.1.2 If any company that has 'write ability' to NIR-OL finds a defect and the company's responsible engineer decides it is a high risk, it will initiate an NIR as required, in accordance with its own company procedures. Where the responsible engineer decides that an NIR is not required and the company is not a member of the M&EE Group they should report the defect to Network Rail as shown in 1.1.1.

1.1.3 Where Network Rail (1.1.1) or another company (1.1.2) decides that an NIR is not appropriate the defect found should be reported at the next M&EE Group meeting.

1.1.4 If a defect is found during maintenance or upgrade on any safety system (see Appendix A) the information should be treated in the same manner as shown in 1.1.1 and 1.1.2.

1.2 Incoming NIRs from NIR-OL

1.2.1 NIRs should be acknowledged and reviewed by Network Rail and assessed for applicability / relevance for plant suppliers that do not have access to NIR-OL.

1.2.2 If a defect is deemed relevant then Network Rail should pass this on to all plant suppliers. Network Rail may liaise with the initiator of the NIR regarding any actions required in the notification. Network Rail should then liaise with the plant suppliers to progress the actions.

1.2.3 The plant supplier should then check / repair all relevant items and inform Network Rail that this has been done, or that it is not relevant. It is good practice for plant owners of equipment subject to an NIR to voluntarily consider withdrawal of these items from service immediately they are informed that an NIR has been issued. This gives the advantage that an official 'do not use' notice is not required and therefore reinstatement can be achieved quickly without any delay caused by waiting for 'do not use' list revision which currently happens on a weekly basis. When items of equipment are voluntarily
stood down, Network Rail should be informed immediately by email (see address in 1.1.1). The consideration of whether to withdraw equipment from service should be taken on a risk based assessment of the information known at the time about the cause of the defect and the resultant consequence of failure.

1.2.4 Each company should take action on the NIR in accordance with its own procedures.

1.3 Defect reporting

1.3.1 All defects should be reported using language applicable for the defect concerned. Photographs should be taken and submitted where these aid understanding of the defect – and it is usually good practice to include a long range photograph to identify the area and perspective before using close up photographs of a defect. An example of good practice for photography is shown in Figure 1.

![Image of Example of good practice for photographic submission](image_url)

**Figure 1** Example of good practice for photographic submission

1.3.2 All defects set out in 1.1.3, and NIRs issued applicable to OTP, plant and equipment should be discussed at each M&EE Group meeting. Where applicable the Group should decide upon a common course of action.
Appendix A

Example list of safety critical systems

- Road and rail wheels
- Suspension and wheel support systems
- Brake systems
- Traction/driveline systems
- Speed indicating systems
- Inter-vehicle couplings and connections
- Fuel systems
- Equipment required for controlling communication e.g. radio systems
- Head, marker and tail lamp systems
- Windscreen wiper and washer systems
- Fire safety systems
- Fastenings that secure covers, or which prevent loads from becoming detached from a vehicle
- Safety interlock systems
- Bolts and other retaining devices that prevent under-floor equipment from falling to the ground
- Air pressure vessels
- Warning horn systems
- Rated capacity indicators (RCI)
- Structural integrity
- Movement limiting devices
- Data loggers
- Lifting accessories
- Circuit protection devices
- Small plant systems (as shown in COP0010) that could lead to a safety critical incident

This list is not exhaustive – where any doubt exists as to what to report contact the professional head of Plant and T&RS at Network Rail.
Appendix B

Safety Critical Defect reporting form

From  Plant Supplier  To  Network Rail
PlantNIRs@networkrail.co.uk

Contact phone number ................

<table>
<thead>
<tr>
<th>Time of defect</th>
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<tbody>
<tr>
<td>Date of defect</td>
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<tr>
<td>Location of defect</td>
<td></td>
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<tr>
<td>Identification No and Type</td>
<td></td>
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<tr>
<td>Use being made of OTP or plant &amp; equipment</td>
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<tr>
<td>Description of defect (and root cause if known)</td>
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<tr>
<td>Identification of the component or system that has given rise to the defect</td>
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<tr>
<td>Remedial action taken to rectify or manage the defect, including any operating restrictions applied</td>
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<td>Any other relevant information</td>
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