

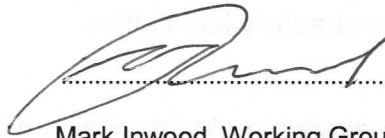
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Guidance Note

Infrastructure Maintenance Restructure – Guidance on the Electrification & Plant Organisation

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Issue record

Issue	Date	Comments
1	June 2010	First issue not formally issued
2	September 2010	Issue 2 includes updates from changes in working practices

Reference documentation

NR/L3/MTC/MG0230, *Infrastructure Maintenance Restructure – Competency matrix*

NR/L3/MTC/MG0231, *Infrastructure Maintenance Restructure – Implementing hosting*

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1 Purpose

Since maintenance was brought in-house during 2004, there have been two significant organisation changes called Phase 2 and Phase 2A. These two organisation changes reviewed and standardised the Maintenance management structure from the centre to Section Manager level.

The direct organisation below the Section Manager was largely unaffected by the Phase 2 and Phase 2A organisation changes. It therefore remained unchanged from what was in-sourced from the different Infrastructure Maintenance Contractors (IMC).

The impact of having different (ex-IMC) organisations between Delivery Units was:

- inconsistencies in the size of teams. There was little correlation between the number of assets, workload and organisation size;
- inconsistent approach to delivery of tasks. Team size, team make-up and delivery methods were different for the same activity from one Delivery Unit to another;
- limited flexibility to be able to deal with changes in workload and demands.

The main objectives behind the Maintenance Restructure (Phase 2BC) restructuring are:

- to create a maintenance organisation that meets the business needs for Control Period 4;
- to have a standard Maintenance organisation across all Delivery Units;
- to create an organisation sized on assets, workload and task frequency with a response structure aligned to business performance requirements;
- to create an organisation able to deliver core maintenance, incident response, life extension and renewals work safely and more efficiently.

2 Scope

This Guidance Note:

- explains how the new E&P organisation is designed to operate;
- communicates how productivity is measured and details ways in which it can be maximised.

This Guidance Note is principally aimed at E&P Maintenance Engineers, Section Manager [Overhead Line Equipment], Section Manager [Distribution and Plant], Section Manager [Conductor Line Equipment] and the Section Supervisors who assist them. It is also a useful reference document for Section Planners, Section Administrators, Section Planners/Administrators, other front line E&P employees and Contractors.

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It is intended to be read with:

- NR/L3/MTC/MG0230, *Infrastructure Maintenance Restructure – Competency matrix*;
- role profile for Section Manager and Section Supervisor;
- Job Descriptions.

3 Summary of key principles

3.1 Overhead line equipment (OLE)

In the main, routine maintenance and inspection is delivered by the Section Manager's organisation. Life extension/renewals/enhancement may also be delivered by the Section Manager's team.

Overhead Line Equipment (OLE) maintenance and inspection activities remain combined under the Section Manager, who is responsible for both activities.

The Section Manager [Overhead Line Equipment] is responsible for the planning and delivery of OLE electrical isolations for both Network Rail activities and the activities of contractors working on the railway infrastructure on Network Rail's behalf.

In the main, hosting arrangements within a Delivery Unit remain unchanged for E&P activities. An E&P Maintenance Engineer will host clearly defined E&P activities within an adjacent Delivery Unit or multiple adjacent Delivery Units.

Response arrangements remain largely unchanged, the basis of response will ordinarily be on a 24/7 basis. The overall requirements for response should be considered at Route level with individual Delivery Units requirements factored therein. Additional response resource will be available from adjacent Delivery Units or pan Route dependent upon severity and location of incident.

3.2 Conductor rail equipment (CRE)

In the main, routine maintenance and inspection is delivered by the Section Manager's organisation. Life extension/renewals/enhancements may also be delivered by the Section Manager's team.

CRE Maintenance and inspection activities for conductor rail, 650/750 d.c. cabling, negative bonding and HV cables are combined under the Section Manager [Conductor Rail Equipment], who is responsible for both activities.

In the main, hosting arrangements within a Delivery Unit remain unchanged for E&P activities. An E&P Maintenance Engineer will host clearly defined E&P activities within an adjacent Delivery Unit or multiple adjacent Delivery Units.

Response arrangements are unchanged with out-of-hours rapid response reliant upon call-out arrangements.

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3.3 Distribution and plant (D&P)

In the main, routine maintenance and inspection is delivered by the Section Manager's organisation. Life extension/renewals/enhancements may also be delivered by the Section Manager's team.

D&P Maintenance and inspection activities remain combined under the Section Manager [Distribution and Plant] who is responsible for both activities.

Statutory Mechanical and Electrical Inspections will be undertaken by an Infrastructure Team Leader responsible to the Section Manager [Distribution and Plant]. This role provides for both periodic Electrical Inspection of LV installations and statutory Inspection of mechanical lifting equipment, loose lifting tackle, ladder inspection, and fall arrest equipment including safety harnesses. This independent role is responsible for the end-to-end process.

Workload within a Route will dictate the number of Infrastructure Team Leaders undertaking this work and their location.

In the main, hosting arrangements within a Delivery Unit remain unchanged for E&P activities. An E&P Maintenance Engineer will host clearly defined E&P activities within an adjacent Delivery Unit or multiple adjacent Delivery Units.

Response arrangements are unchanged with out-of-hours rapid response reliant upon call-out arrangements.

3.4 Sudbrook pumping station

Maintenance and inspection activities at Sudbrook pumping station remain combined under the Depot Manager [Sudbrook] who is responsible for both activities.

Response arrangements remain unchanged for rapid response requirements to incidents within Sudbrook pumping station. The employees at Sudbrook pumping station provide an on-call facility on Western Route for the provision of mobile signalling supply generators and employees are on call to facilitate this activity.

4 Roles

4.1 Job purpose

The relevant job purpose for each of the roles in the new Electrification and Plant organisation are listed in Table 1. Although these appear in the individual job description documents, it is useful to see them together to better understand the link between the roles. Reference should be made to the relevant organisation charts, job descriptions and role profiles.

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Role	Job purpose
E&P MAINTENANCE ENGINEER	Direct and manage the E&P Maintenance team in the inspection and maintenance of the E&P Assets to agreed standards and within budget.
ASSISTANT E&P MAINTENANCE ENGINEER	Direct and manage the technical support team which provides technical, engineering and management support to the E&P Maintenance Engineer's team.
SECTION MANAGER	Manage and direct the Infrastructure Maintenance delivery team to deliver inspection, maintenance and renewal of assets to standards. Manage activities within a programme of work utilising agreed resource levels, budget and unit cost measures to achieve safety, asset performance, cost and quality business targets.
SECTION SUPERVISOR	Assist the Section Manager in the inspection, maintenance and renewal of assets to standards and with agreed resource levels, budgets and unit cost measures. Supervise the delivery of work and undertake specific inspections as required. Assist in the management of employees as directed.
WORKING SUPERVISOR	Direct, organise and motivate the team so that work is undertaken safely, efficiently and to the relevant standards. Undertake and direct inspection, faulting, maintenance and renewal work as allocated. Assist in the management of staff as directed.
TEAM LEADER	Direct, organise and motivate the team so that work is undertaken safely, efficiently and to the relevant standards. Undertake and direct inspection, faulting, maintenance and renewal work as allocated.
TECHNICIAN	Provide support to the Team Leader to organise and motivate the team so that work is undertaken safely, efficiently and to the relevant standards. Undertake inspection, faulting, maintenance and renewal work as allocated. Where directed, act as a Team Leader.
OPERATIVE (OLE, CRE and Sudbrook)	Undertake work as allocated safely and efficiently.
SECTION PLANNER	Using corporate planning processes, systems and databases, undertake the development of detailed, fully resourced and optimised work plans for approval by Section Managers.
SECTION PLANNER / ADMINISTRATOR	Undertake the development of detailed, fully resourced and optimised work plans for approval and provide accurate and effective administrative support to the line manager and his/her team.
SECTION ADMINISTRATOR	Provide an accurate, efficient and effective administrative support to the line manager. Work as directed or using own initiative as the situation demands.

Table 1 – Roles

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4.2 Section Trinity

The relationship between the Section Manager, Section Planner and Section Administrator is extremely important. This has previously been referred to as the Section Trinity principles. The role of the Section Planner (SP) and Section Administrator (SA) is to provide support to the Section Manager. The SP and SA perform much of the planning and support activity which historically would have been done by the Section Manager and took them away from the core work of managing their Section. Therefore, it is important that these roles work effectively so that the Section Manager receives the right level of support.

5 Team structure

5.1 General

This clause lists the typical team structure for E&P and its sub-disciplines. However, the team composition may change depending on the tasks to be undertaken, the required protection arrangement and employee competence.

5.2 OLE

5.2.1 OLE inspection and maintenance

The typical team structure of an OLE team is 1 Working Supervisor and or 1 Team Leader [Overhead Line Equipment], 1 Technician [Overhead Line Equipment] and 2 Operatives [Overhead Line Equipment]. However, the team size will vary by task examples, as follows:

- a) OLE Inspection (principally ground level activities). Typical team composition of 1 Team Leader [Overhead Line Equipment] or 1 Technician [Overhead Line Equipment] for the inspection activity, plus the required number of Technicians/Operatives [Overhead Line Equipment] for protection activities;
- b) OLE Maintenance (principally high level activities). Size to vary by task, with a typical team ratio of 1 Team Leader [Overhead Line Equipment], 1 or 2 Technicians [Overhead Line Equipment] and 1 or 2 Operatives [Overhead Line Equipment]. The number of Operatives will change to suit the protection, isolation requirements and the type of access equipment employed.

Where necessary, additional support may be provided from any other person subject that the person providing support being competent to do so.

5.2.2 OLE isolation

A simple isolation will have a minimum team size of two including the Nominated Person. Team size can be varied to suit complexity and criticality of the isolation.

A Nominated Person will receive pre-arranged "isolation assistance" from the in-house team awaiting receipt of an Overhead Line Permit. Pre-arranged Isolation assistance for a Nominated Person can also be derived from other disciplines or groups of staff depending upon availability.