

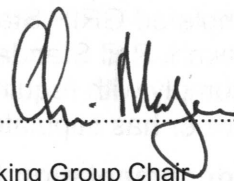
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Level 3

Signalling Equipment Support Specification

Endorsement and Authorisation

Endorsed by:



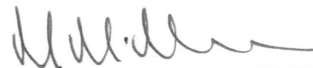
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Issue record

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1	June 2008	First Issue

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 01/09/2008.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 4 to continue to comply with the Issue of any relevant Network Rail Standards current when GRIP Stage 4 was reached and not to comply with requirements contained herein, unless the designated Standard Owner has stipulated otherwise in the accompanying Briefing Note.

Reference documentation

NR/L2/RSK/00001	Integrated Risk Management Process
NR/PRC/MTC/MG0063	Procedure for requisitioning of spares
NR/CS/ACC/029	Product and Plant Acceptance

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Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

Contents

1	Purpose	4
2	Scope	4
3	Supporting Documents	4
4	Definitions	4
5	Levels of Support and Assessment of Risk	6
5.1	Background - The Need for a SESS Contract	6
5.2	Levels of Support	7
5.3	Determination of Level of Support – Risk Assessment	8
6	Type of Service and Support Level	9
6.1	System Support Management Arrangements	9
6.2	Performance Monitoring	11
6.3	Data Recording and Corrective Action System (DRACAS)	13
6.4	Telephone Support and Call Out	15
6.5	Spares and Returns	17
6.6	Technical Investigation	18
6.7	Strategic Software/Data Management	20
6.8	Maintenance of Product Approval Status	21
6.9	Update of Manuals	22
6.10	Provision of Training	23
6.11	Service and Recalibration of Test Equipment	24
6.12	Obsolescence Management	25
6.13	Interlocking Rules Changes and the SPG Process	26
6.14	Hazard Log Management	27
6.15	Intellectual Property Rights (IPR) Transfer and ESCROW agreement	28
7	Other Core SESS Requirements	29
7.1	SESS Performance Targets	29
7.2	SESS Contract Period of Cover	29
7.3	Pricing Structure	29
	Appendix A - Product / Service Matrix	30
	Appendix B Client's Requirements Form	34

Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

1 Purpose

This document specifies the minimum support levels to be provided under contract for the principal categories of signalling equipment. The service levels are defined for the required support tasks to ensure consistency across all signalling support contracts.

2 Scope

The support contract specification applies to signalling equipment and systems and covers maintenance support and whole life product management.

When a new scheme is commissioned there is normally a defined period for support and contractual defect liability arranged by the project. This specification is not intended for application to this defect correction period (DCP), however the project is required to negotiate the smooth transition to the lifetime support arrangements in accordance with the requirements specified in this document.

Service level descriptions are generic and not system or equipment specific. The signalling equipment and systems are not supplier specific.

3 Supporting Documents

NR/L2/RSK/00001	Integrated Risk Management Process
NR/CS/ACC/029	Product and Plant Acceptance
NR/PRC/MTC/MG0063	Procedure for requisitioning of spares

4 Definitions and Abbreviations

BS	Bronze Support
DRACAS	Data Recording And Corrective Action System
Client	Head of Signal Engineering
EBA	Eisenbahnbundesamt (Federal German Railway Authority)
Ellipse	Work & asset management system
Escrow	The holding of funds, documents and other property by a third party for a business transaction e.g. transfer of IPR and designs
FMS	Fault Management System
GS	Gold Support
IPR	Intellectual Property Rights
KPI	Key Performance Indicator
LVD	Low Voltage Directive
NR	Network Rail
NRG	National Records Group
NST	NR National Specialist Team
OEM	Original Equipment Manufacturer or system supplier

Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

O&M	Operation and Maintenance
SESS	Signalling Equipment Support Specification
SPG	Signalling Principles Group
SS	Silver Support
SMS	Signal Maintenance Specification
SMTH	Signal Maintenance Testing Handbook
SWT	Signal Works Testing

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Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

5 Levels of Support and Assessment of Risk

5.1 Background - The Need for a SESS Contract

Signalling systems consist of many component parts with complex interactions often using sophisticated technology and support tools. Such systems need high availability which is achieved through good design, installation standards and in-service support.

An effective support regime requires:

- Products performing to accepted targets
- Skilled maintenance and support personnel
- Adequate spares
- Obsolescence management

The primary support is from the local maintenance organisation with repairs and specialist support by the Original Equipment Manufacturer (OEM) or system supplier.

If no support contract or other similar arrangement is in place, the supply of system support will be contracted piecemeal. Under these circumstances, the turn around time for any work package may not be guaranteed. The OEM will generally be the only suitable supplier of SESS services due to the in-depth system knowledge and competence required.

This specification defines the support levels applicable to critical signalling equipment for lifetime support to ensure consistency across all suppliers.

Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

5.2 Levels of Support

In this section, each type of support service is identified and described, the effects of non-provision are then discussed, and the service is then prioritised according to its importance.

Three levels of support shall be provided; Gold, Silver and Bronze.

Gold (GS) – High priority, a service that is essential to safeguard infrastructure performance in the short term or that will become essential in the medium term. Applicable where the impact of an outage or of poor performance will be high.

Silver (SS) – Medium Priority, a service that is required but where immediate response is not essential. There is unlikely to be any deterioration in infrastructure performance in the short term (next 5 years), and any threat is likely to be self revealing or predictable and to develop over time. Applicable where the impact of an outage or of poor performance will not be high.

Bronze (BS) – Low Priority, a service that is required to safeguard infrastructure performance in the longer term (more than 10 years), and where the equipment is widely in use, performance is stable, and spares are readily available. Any threat is likely to be self revealing or predictable and to develop over time. Applicable where the likelihood of a major failure is low or the impact of an outage or of poor performance will be low.

Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

5.3 Determination of Level of Support – Risk Assessment

The strategic and business importance of signalling equipment and therefore service levels shall be assessed using the Network Rail Corporate Risk Scoring Matrix. The principles and methods are described in section 7 of NR/L2/RSK/00001, “Integrated Risk Management Process”.

Service Levels determined by an expert group using the Integrated Risk Management Process are provided in Appendix A. The assessments are based where appropriate, on mature systems which have achieved stable reliability, with good availability of spares. A higher level of support is required for new or novel systems and this is normally arranged by the project concerned in agreement with the NST. The duration of the higher support levels would also be agreed by the project but would typically be one year, after which the levels specified in Appendix A would apply.

The Client for the support contract shall decide on the number and extent of support contracts required. This shall be recorded on the Client’s Requirement Form in Appendix B.

5.3.1 Variations to specified Service Levels

Variation from the levels provided in Appendix A may be required as a result of installation or site specific factors e.g. Route Priority, traffic density, closure or unavailability of alternate routes.

If it is necessary to vary the Service Levels the changes shall be supported by the Corporate Risk Scoring assessment process described in NR/L2/RSK/00001.

Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

6 Type of Service and Support Level

6.1 System Support Management Arrangements

The overall management and coordination of all the other OEM actions is covered by this requirement.

The OEM shall have a management system in place to manage all support requirements. Regular review meetings with NR shall be held to monitor issues arising and support provided. This shall include monitoring and recording information relevant to the provision of services.

The OEM shall retain system expertise in order to provide the support services required.

Where applicable, a decision making body such as a performance review group or DRACAS group, shall convene periodically to review and resolve performance issues. These meetings may be combined with the System Support Management meeting.

The contact details for the primary and alternative representatives of NR and for the OEM for Technical and Administrative purposes shall be stated.

The agenda for the System Support Management Meeting shall include the following topics:

- OEM report on services provided since the last review
- Areas of concern
- Review of support requests
- Review of site attendance and investigations
- Obsolescence report
- Management of spares and repairs
- Safety issues
- Contractual issues

Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

6.1.1 Service Levels - System Support Management

Gold

High level of system management required to support monthly review meetings including the provision of a report on services provided since the last review. In addition provide / maintain a DRACAS database and documentation in support of DRACAS meetings.

OEM commitment:

- 35 resource-hours per month
- The system expert to provide detailed analysis of system performance
- Host and take minutes of review meetings

NR commitment:

- Chair review meetings

Silver

Medium level of system management required to support monthly review meetings including the provision of a report on services provided since the last review. In addition provide / maintain a database of failures and incidents to support performance review meetings.

OEM commitment:

- 18 resource-hours per month
- The system expert to provide detailed analysis of system performance
- Host and take minutes of review meetings

NR commitment:

- Chair review meetings

Bronze

Basic level of system management required to support quarterly review meetings including the provision of a report on services provided since the last review.

OEM commitment:

- 7 resource-hours per month
- The system expert to provide analysis of system performance
- Host and take minutes of review meetings

NR commitment:

- Chair review meetings

Ref	NR/L3/SIG/30011
Issue	1
Date	1 June 2008
Compliance Date	1 September 2008

6.2 Performance Monitoring

The OEM shall provide NR with reports and statistics covering unit returns, failure details and actions taken. These reports shall be provided at the intervals specified and at least one week before the performance review meeting. NR shall determine suitable Key Performance Indicators (KPI) to permit measurement and review of equipment performance and OEM deliverables.

The reports shall include analysis of trends, identification of systematic failures and action plans to improve performance. When adverse trends are identified the review shall be supported by a NR analysis of failures as reported in FMS. Where a valid trend is identified and confirmed the appropriate corrective action shall be agreed with NR.

Where a DRACAS process is required, the performance monitoring support would normally be provided by this service. The performance monitoring process would therefore resume once the DRACAS process ceases.

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