

**[Area]**  
**Technology Managing Agent  
Contractor Contract**  
**Service Information**  
**Annex SI 18**  
**Reference Documents**

**SERVICE INFORMATION FOR TECHMAC CONTRACT**

**ANNEX SI 18**

**CONTENTS AMENDMENT SHEET**

<b>Revision Number</b>	<b>Issue</b>	<b>Amendments</b>	<b>Initials</b>	<b>Date</b>
0	1	Tender Issue		

## 18 REFERENCE DOCUMENTS

**18.1** The Reference Documents are those documents identified in the following Tables 18.1, 18.2, 18.3, and 18.4 together with any amendments or additions thereto published by the *Employer* from time to time. Refer to paragraph 2.4 of the Service Information for the duties of the *Provider* in relation to the Reference Documents.

The documents listed in Table 18.1 form part of the specification for the maintenance of the Traffic Technology Systems. In the listed documents the *Provider* is responsible for all the duties and requirements placed on the:-

- Regional Maintenance Contractor (RMC)
- Regional Maintenance Contractor Managing Consultant (RMCMC)
- Site Data Designer (SDD)

and additionally some responsibilities formerly carried out by the:

- Highways Agency Area Managing Agent (MA)
- Highways Agency Area Term Maintenance Contractor (TMC)
- Highways Agency Managing Agent Contractor (MAC)
- DBFO Company

Including:

- provision of temporary traffic management for planned works, slot cutting in carriageway surfacing for life expired inductive loop renewal, CCTV mast winch test certification, inspection and reporting to the Service Manager on the provision by Others of safe and unobstructed access and adequate visibility to roadside Traffic Technology Systems, including control of adjacent vegetation.

The listed documents are subject to revisions and updating, it is the *Provider's* responsibility to ensure they are working to the latest copies. Documents listed in Table 18.1 are available from TSS Plans Registry, Bristol, Tel: 01173 728270 or email [Tss\\_plans\\_registry@highways.gov.uk](mailto:Tss_plans_registry@highways.gov.uk)

The Traffic Technology Systems maintenance documents cover the procedures, service levels, fault management and routine maintenance requirements for the National Motorway Communications System (NMCS).

Figure 18.1 shows the relationship and hierarchy, provides an indication of what they contain and outlines the scope and content of the *Employer's* maintenance documentation in Table 18.1. The documents are categorised into the following sections; General, Maintenance Procedures, Fault Management, Routine Maintenance, National Roadside Telecommunications Services (NRTS), Installation, Regional Control Centre, Commissioning and Decommissioning, Information Management and Site Data and Business Management.

**Table 18.1**

Ref.	Publication	Brief Description
	<b>General</b>	
	MCS 206 List of Drawings, Specifications and Instructions	Index of traffic systems and signing drawings instructions and other documents of a technical nature held in the TSS Plans Registry
	MCX 0131 Series Drawings	Installation Drawings, Typical Schematic Drawings and Schedule of Symbols for NMCS1;NMCS2;MIDAS;Signals; Telephones
	MCH 1952 Specifications that define procedures, instructions and requirements relating to the maintenance of the Highways Agency Traffic Technology Systems	
	<b>Maintenance Procedures</b>	
1	MCH 1349 Operational and Maintenance Requirements for Traffic Technology Systems and Equipment	Status of the equipment and systems being maintained.  Requirement of scheme to meet operational and support maintenance.
2	MCH 1350 Liaison with Third Parties.	<i>Provider's</i> responsibility for third party fault management
3	MCH 1399 Notification of Changes in Equipment Quantities	Changes in maintenance equipment
4	MCH 1461 Contractor Reports and Availability / Performance Calculations	Reporting / availability and performance calculations from communications maintenance
5	MCH 1470 Procedure for the Production of Site Records for Maintenance (see amendments following this table)	The requirements for the production of site records to be completed by the contractor for maintenance.
6	MCH 623 Approval of Dedicated Maintenance Team and Changes	Approval of personnel and replacements

Ref.	Publication	Brief Description
7	MCH 1652 Communications Records Drawings – Computer Aided Drawings Standard	Defines the <i>Employer's</i> requirements for formatting of CAD drawings including layering conventions.
8	MCS 216 Bulk Purchase Equipment Store Codes (HA Internal Document)	Lists Bulk Purchase Equipment Store Codes
9.1	TD 24/97.Traffic Signals	Permanent traffic signals and associated equipment at junctions and signalled pedestrian crossings on APTRs
9.2	MCH 1980 Process for the Commissioning and Handover of Traffic Technology Systems	Process for the Commissioning and Handover of Traffic Technology Systems
9.3	MCH 2744	Ramp Metering Operational Procedures
9.4	MCH 2745	Ramp Metering Maintenance Handover Procedures
9.5	MCH 2754	Ramp Metering Maintenance Matrix of Responsibility
9.6	MCH 1788(draft) HADECS	Advanced Motorway Indicator and HADECS Enforcement Special Equipment Maintenance Procedures.
9.7	M42 J3A -7 Active Traffic Management Pilot Project - Maintenance Plan	Revision F – June 2006 (draft)
9.8	MCH 1788 Advanced Motorway Indicator and HADECS Enforcement Equipment Special Maintenance	Special maintenance procedure for correct and proper maintenance of AMI signals and HADECS Equipment.
	<b>Fault Management</b>	
10.1	MCH 1381 Reporting NMCS Operational Problems	Procedure for reporting all problems observed on a NMCS system except site data anomalies.
10.2	Technology Performance Management Service (TPMS)	An overview of the Employer's TPMS with schematic system flow charts.
11	MCH 1433 Cable Repair Procedures	The object of this instruction is to specify cable repairs policy and practices for the armoured and unarmoured ducted communication and energy cable infrastructures.

Ref.	Publication	Brief Description
12	MCH 1453 Mini Carrier Systems	Responsibilities of maintenance activities
13	MCH 640 Guide for the Installation of Detector Loops	Guide for the Installation of Detector Loops on Motorways and all Purpose Trunk Roads
14	MCH 690 Maintenance boundaries for Transmission Stations	Responsibilities of maintenance activities at Transmission Stations.
15	MCH 698 Requirements for Repair and Reinstatement of Damaged Motorway Communications Equipment Including Cable	Procedure which is applicable to all damaged communications equipment. It defines the procedure to be adopted in the event of damaged to the motorway communications system, and in particular, buried troughed or ducted cables.
15a	MCH 1867 NOMAD Fault Reporting	Reporting/availability and performance calculations of Traffic Technology Systems.
	<b>Routine Maintenance</b>	
16	MCH 1425 Motorway Communication Cable and Equipment	Tests on cable performance
17	MCH 1654 Routine Maintenance of the Telemetry T1000 Units	Routine maintenance of telemetry units at Transmission Stations
18	MCH 1760 Routine Maintenance Procedures (see amendments following this table)	Identifies the minimum frequencies for carrying out the routine maintenance procedures and inspections. For each type of equipment, it refers to the relevant MCH document for the routine maintenance procedures.
19	MCH 1851 Maintenance of Ducted Cable Infrastructure	Maintenance Instruction for Ducted Cable Infrastructure
20	MCH 1865 NOMAD Asset Surveys and Inspections	Database is a central register for all Highways Agency motorway communications assets

Ref.	Publication	Brief Description
21	MCH 1950 Transmission Equipment	The systems and equipment used to carry data and speech to support the NMCS and other control and communications systems.
22	MCH 1957 Electrical Tests and Inspections	The electrical installations associated with the NMCS and other control and communications systems.
23	MCH 1743 Telephones	Testing and cleaning of these telephones is undertaken to ensure a satisfactory service to the public in line with the road users charter which sets the requirements for roadside emergency telephone system with published standards of service.
24	MCH 1949 Signals	Signal Equipment is used to display restrictions, instructions or warnings to drivers.
25	MCH 1685 Message Signs	Message signs equipment comprises all types of Enhanced Message Signs (EMS) and Variable Message Signs. These signs and all used to convey driver information or instructions to motorists.
26	MCH 1953 NOMAD Asset Bar Code Procedures	Bar code reader equipment. All assets will have an allocated bar code to be used for unique identification of each asset.
27	MCH 1948 MIDAS Routine Maintenance of MIDAS equipment	Motorway Incident Detection and Automatic Signalling. Objective of MIDAS is to prevent secondary accidents due to congestion.
28	MCH 1951 Routine Maintenance of Instation Equipment	Equipment comprises all the systems and equipment used to support the National Motorway Communication System (NMCS) Emergency Telephone System.
29	MCH 682/1844 CCTV	The minimum routine maintenance procedures and requirements on Camera Masts, Poles and Mountings



Ref.	Publication	Brief Description
30	MCH 1851 Ducted Cable Infrastructure (see amendments following this table)	Instructions relating to ducted cable infrastructure
31	MCH 685 Maintenance of Phillips CCTV Masts and Poles	The minimum routine maintenance procedures for Phillips CCTV masts /poles
32	MCG 1099 NMCS Non Armoured Cable Testing Procedures	Information Instruction
33	MCH 1626 Routine Maintenance of EMS Stand Alone Controller	Routine Maintenance Instruction
34	MCH 1649 Procedure for Contractors using the RCC Network for Testing	Procedural Requirements
35	MCH 1950 Routine Maintenance of Transmission and Communications Equipment	Routine maintenance requirements.
36.1	Technology Maintainer's Stores Operational Procedures version V1	Management of the Employer's parts and equipment stocks whilst in the custody of the <i>Provider</i> .
36.2	Stock Movement Data Base v 270706	Database for Employer's Stocks
	<b>National Roads Telecommunications Services (NRTS)</b>	
37	MCH 1140  NRTS Leaflet Communications for the Modern Road Network	General information leaflet
38	MCH 1141  NRTS Brochure. A Summary Guide to NRTS	General information brochure
39	MCH 1142  NRTS Overview. A Comprehensive Guide	Overview of the NRTS Project

Ref.	Publication	Brief Description
40	MCH 1144 Project Manager Guide for HA Scheme Sponsors using the NRTS services	Project Managers guide
41	MCH 1145 Road Maintainers Guide. How NRTS will affect Road Maintainers	Road Maintainers Guide
42	MCH 1146 RMC Guide. How NRTS will affect electrical Regional Maintenance Contractors	RMC Guide
43	MCH 1147 Technical Developers Guide. Developing new systems that interface with NRTS	Technical Developers Guide
44	MCH 1148 Supporting Information on NRTS services and interfaces	Details of transmission services and the location of service delivery points
45	MCH 1149 Supporting Information. On Assets and Responsibilities that will transfer to NRTS	A reference for the general principles of assigning responsibility for infrastructure that will transfer to NRTS Co.
46	MCH 160 Scheme Case Study. A case study for applying NRTS services to an HA Scheme	Scheme Case Study
47	NRTS Supporting Information Services and Interfaces GD 00323/RT/E/257	NRTS Supporting Information Transmission Service Types and their Interface Definitions  <b>[Note to Compiler: identify where this document is located ]</b>

Ref.	Publication	Brief Description
48	NRTS Project Agreement Schedule 1.3 General Constraints GD00323/RT/E/484	Schedule of General Constraints associated with NRTS Contract  [Note to Compiler: identify where this document is located ]
49	Interim List of NRTS Registered Documents	NRTS Supporting Information Interim list of registered documents produced by NRTS Co.  [Note to Compiler: identify where this document is located ]
50	NRTS Provisioning Periods (Extract from NRTS Contract Schedule 1.2)	Provisioning periods to be allowed by the Provider for the procurement of NRTS Co. Services  [Note to Compiler: identify where this document is located ]
	<b>Regional Control Centre</b>	
51	MCH 1849 RCC Technology Maintenance	Details of Maintenance and Repair Issues & Technical Support Role Requirements
51a	MCH 1881 RCC Technology Maintenance	Permit to Access RCC and do Work
	<b>Installation Commissioning and Decommissioning</b>	
52	MCF 2340 Installation Commissioning and Decommissioning	Installation, commissioning and decommissioning of NMCS2 equipment supplied by the <i>Employer</i> .
53	MCH 1472 NMCS2 Site Acceptance Certificate – Telephone Responder	Commissioning test Certificate – Telephone Responder
54	MCH 1476 NMCS2 Site Acceptance Certificate – Signal Transponder	Commissioning test Certificate – Signal Transponder
55	MCH 1755 NMCS2 Midas Outstation Site Acceptance Procedures	NMCS2 Midas Outstation Site Acceptance Procedures
56	MCH 1761 NMCS2 Midas Transponder Site Acceptance Procedures	NMCS2 Midas Transponder Site Acceptance Procedures

Ref.	Publication	Brief Description
57	MCH 1762 NMCS2 Midas LCC and MIU Site Acceptance Procedures	NMCS2 Midas LCC and MIU Site Acceptance Procedures
58	MCH 1980 Process for the Commissioning and Handover of Technology Schemes	Summary of commissioning and handover process
	<b>Information Management</b>	
59	MCH 1864 NOMAD – Registering an Asset	Database containing an asset inventory
60	MCH 1868 NOMAD -Configuration	A register of configuration data required by users when defining the location and attributes of an asset in order to advise such changes
61	MCH 1852 NOMAD – National on line Database  Definitions of Asset Category, Types and Variants	Database tool designed to support maintenance management.
62	MCH 1854 NOMAD – Overview of System	Provides an overview of system and an introduction to the equipment, data stored, facilities and procedures.
63	MCH 1861 NOMAD User Guide	Database to enable Highways Agency to manage the Traffic Technology Systems.
64	MCH 1954 NOMAD GPS Procedures	NOMAD uses a GPS reference for each asset and the mapping database uses this reference to place assets on a representative map of the motorway and APTN network
65	MCH 1956 NOMAD  Database Workabout Handbook	Provides detailed instructions for using the Workabout NOMAD application.
66	MCH 1286 Request for Financial Approval (Standard & Non Standard Schemes) and Bulk Purchase Equipment Order	
	<b>Site Data</b>	
67.1	MCF 2253 Application Work Spec for NMCS software Site Data Management	Outlines the services required and the software for which the service is required.

Ref.	Publication	Brief Description
67.2	MCH 1596 HATMS Site Data Change Procedure	
68	MCH 1253 National Motorway Communications System Site Data preparation	Dept. of Transport Instruction.
69	MCH 696 NMCS2 Site Data Change Procedure	Defines the Site Data Change Procedure for the NMCS2 system.
70	MCH 1672 21Bit Interface Site Data Proforma	Describes the procedures for acquiring site data EPROM's for 21 bit interface transponders.
71	MCH 1679 Instruction to NMCS Site Data Management Contractors for weekly reporting	Defines the requirements of the Weekly Reporting that is to be undertaken by the Site Data Management Contractor.
72	MCH 1689 NMCS2 Data System Message and Site Data Header Code Register	The purpose of this document is to register all non-telephone messages transmitted on NMCS2 interfaces (internal and external) and used by systems associated with NMCS2.
73	MCH 1700 Compiling Site Data for the NMCS	Guide to signal sequencing, signal site data and electronic addressing of NMCS equipment.
74	MCH 1704 NMCS2 Site Data Change Order	Site Data Change Proforma
75	MCH 1705 NMCS2 Permit to Connect	Permit to Connect Proforma
76	MCH 1706 NMCS2 Permit to Use	Permit to Use Proforma
77	MCH 1714 NMCS2 Test Site Data	
78	MCH 1726 NMCS2 Message Sign Subsystem Site Data Document	Describes the use of each field in the Message Sign Subsystem's Site Data and the format for loading into NMCS2.
79	MCH 1753 NMCS2 MIDAS Site Data Specification	Describes the requirements of the MIDAS system components and their communication interfaces.

Ref.	Publication	Brief Description
80	MCH 1816 MIDAS Site Data Entry Package User Guide	User Guide for the MIDAS component of the Highways Agency Traffic Management Systems Data Entry Package.
	<b>Business Management</b>	
81	Maintenance Contract Management – AP6 Guidance Note (Dec 2005)	Outline requirements for Maintenance Contractor Management (Ref.CD2)

### Amendments to MCH and MCF Documentation

#### **MCH 1381** (May 2005) Reporting NMCS Operational Problems

Section 4 National Fault Database (NFDB)

Add new para. 4.3

In addition to the master process defined within this instruction the *Provider* shall also submit fault reports electronically to the National Fault Database via HTML client. The *Provider* shall be responsible for obtaining passwords and user identification necessary for access to the system from the *Service Manager*.

#### **MCH 1470** (April 1998) Procedure for the Production of Site Records for Maintenance

Section 2.1

Delete 'Regional Maintenance Contractor' and insert 'Technology Managing Agent Contractor (TechMAC)'

Section 2.3

2<sup>nd</sup> paragraph – Delete all after 'for Maintenance Branch' and insert 'shall be provided in AutoCAD format'

#### **MCH 1760** (June 2001) Routine Maintenance Procedures

Any area specific requirements to be included here

#### **MCH 1851** (September 1998) Ducted Cable Infrastructure

Any area specific requirements to be included here

#### **MCH 1867** (March 2005) National Online Motorway Asset Database - NOMAD Fault Reporting

Section 2.4.4. Add the following sentence

‘Fault records are to be entered into NOMAD within 24 hours of the fault being reported or identified’.

**MCH 1957** (February 2005) NMCS Maintenance Instruction Electrical Inspection & Tests

Add new para 2.4.3

‘In the assessment of competence for personnel engaged on electrical inspection and testing the *Provider* shall ensure that such personnel hold a minimum of the following City & Guilds certification:

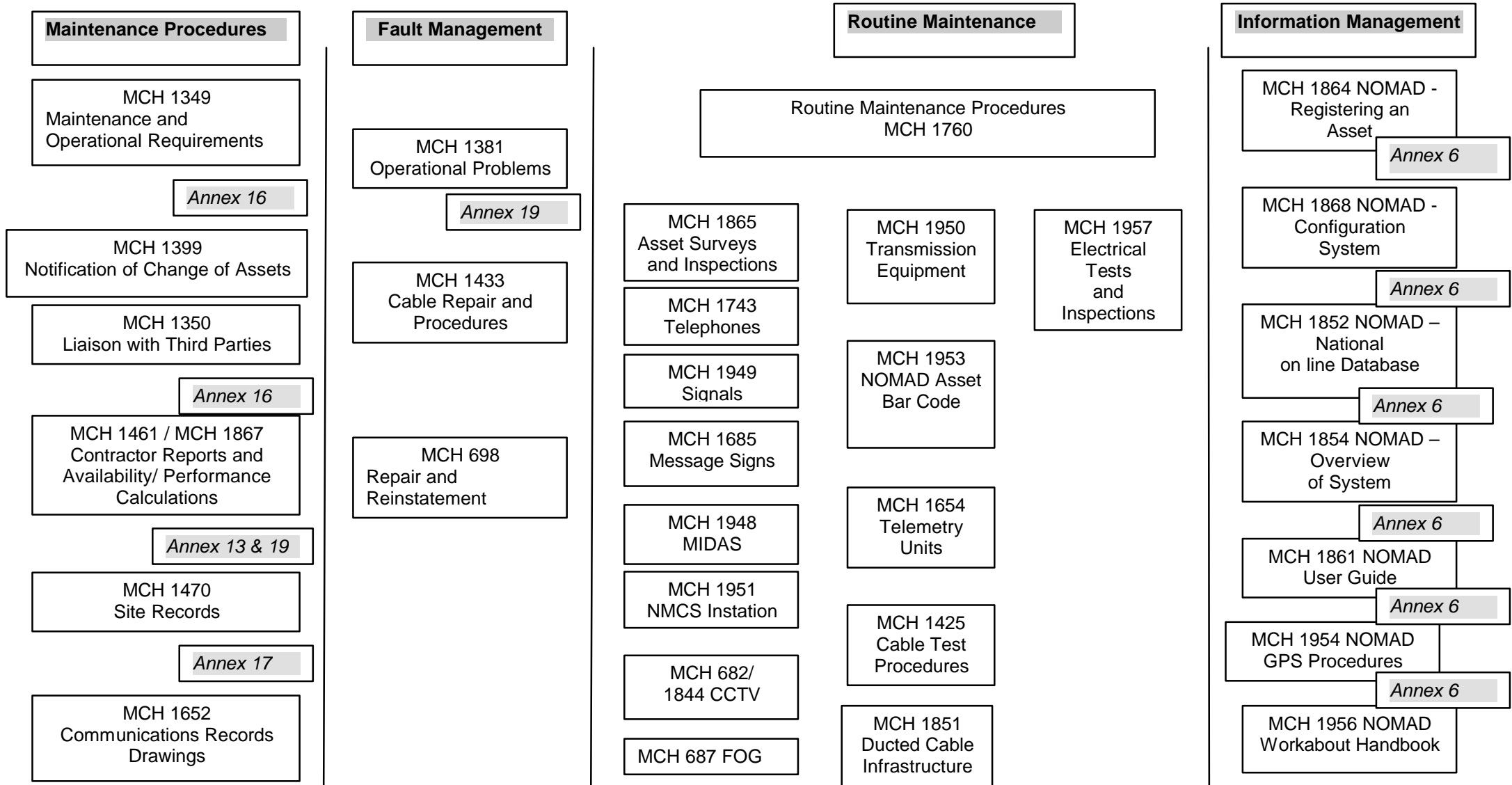
BS7671: Requirements for Electrical Installations (C&G Ref: 2381)

Level 3 Certificate in Inspection, Testing and Certification of Electrical Installations (C&G Ref: 2391)

(Personnel must hold BS7671 Certification before undertaking the C & G Ref: 2391 qualification)

In addition to the above requirements, inspection and testing personnel must also have adequate knowledge of operation of any specialist equipment encountered outside the scope of the above two named City & Guilds qualifications. This may be achieved by training provided by the manufacturer or supplier of the specialist equipment

Figure 18.1 Principal Traffic Technology Systems Maintenance Documentation





## 18.2 Traffic Technology Systems Area Specific Documents

Table 18.2 contains a list of area specific documentation together with information on the sources from which those documents can be obtained. In the case of any ambiguities or discrepancies discovered within the documents listed in Tables 18.1 and 18.3, these shall be explained and adjusted by the *Employer* who shall thereupon issue to the *Provider* appropriate instructions in writing.

### Table 18.2 Library of Manufacturers Instructions and Maintenance Manuals

- (i) A list of Manufacturers Instructions and Maintenance Manuals for Road Traffic Signals **[Note to Compiler: Project Sponsor to confirm if Road Traffic Signals are included in the contract]** is provided **[Note to Compiler: insert the location of relevant documents]**
- (ii) A list of manufacturers' instructions and manuals for other Traffic Technology Systems equipment is **[Note to Compiler: insert the location of relevant documents]**
- (iii) A list of Manuals relating the Common Database is provided **[Note to Compiler: insert the location of documents if at to Regional specific requirement]**.
- (iv) On receipt of requests during the tender period, the *Service Manager* will arrange for access to this information to be obtained by appointment.

**18.3 General Documents**

Table 18.3 presents a list of general documents, including Department for Transport (DfT) Highways Agency documents, which may be relevant to the work undertaken by the *Provider* in the performance of its duties. The list identifies the sources from which the documents can be obtained.

**Table 18.3**

Ref	Publication	Published by / Available from
	<b>General Documents</b>	
1	Routine and Winter Service Code (RWSC)	The Stationery Office / The Highways Agency PartnerNet Website <a href="http://www.ha-partnet.org.uk">http://www.ha-partnet.org.uk</a>
2	Network Management Manual (NMM)	The Stationery Office / The Highways Agency PartnerNet Website <a href="http://www.ha-partnet.org.uk">http://www.ha-partnet.org.uk</a>
2.2	Highways Agency Traffic Officer Service and Service Provider Joint Operating Principles (Version 1.72 dated 26 May 06)	Highways Agency
2.3	The Highways Agency Traffic Officer Service National Guidance Framework (NGF) and Detailed Regional Operating Agreements (DROA).	Highways Agency
3	Interim Advice Notes	Highways Agency
4	Chief Highway Engineer (CHE) Memorandum	Highways Agency
5	Area Management Memos	Highways Agency
6	Traffic Signs Manual and Notes for Guidance on Safety at Roadworks	The Stationery Office
7	<i>Employer's</i> Circulars	Highways Agency Regional Offices
8	Regional Transport Notes	Highways Agency Regional Offices
9	Regional Engineering Circulars/Letters	Highways Agency Regional Offices
10	Highways Agency Biodiversity Action Plan	Highways Agency

Ref	Publication	Published by / Available from
11	HA Business Plan	Highways Agency <a href="http://www.highways.gov.uk/aboutus/136.aspx">http://www.highways.gov.uk/aboutus/136.aspx</a>
12	Corporate plan 'Customers First',	Highways Agency <a href="http://www.highways.gov.uk/aboutus/136.aspx">http://www.highways.gov.uk/aboutus/136.aspx</a>
13	Strategic Roads 2010,	Highways Agency <a href="http://www.highways.gov.uk/aboutus/136.aspx">http://www.highways.gov.uk/aboutus/136.aspx</a>
14	Highways Agency – Changing the customer experience through the Highways Agency Information Strategy	Highways Agency Publications Centre, PO Box 236, Wetherby, West Yorkshire, LS23 7NB Tel: 0870 1226 236; fax: 0870 1226 237; email: <a href="mailto:highwaysagency@twoten.press.net">highwaysagency@twoten.press.net</a>
15	HA Network Strategic Plans	<a href="http://www.highways.gov.uk/aboutus/669.aspx">http://www.highways.gov.uk/aboutus/669.aspx</a>
16	Highways Agency – Procurement Strategy	<a href="http://www.highways.gov.uk/business/706.aspx">http://www.highways.gov.uk/business/706.aspx</a>
17	National and Local Environmental Strategies and Policies (including: Towards a Balance with Nature: Highways Agency Environment Strategic Plan; and Living with Roads: An Environmental Strategy for England's Main Roads).	Highways Agency
18	A New Deal for Trunk Roads in England (including Understanding the New Approach to Appraisal; and Guidance on the New Approach to Appraisal).	DfT website
19	A New Deal for Transport: Better for Everyone. The Government's White Paper on the Future of Transport.	DfT website
20	Highways Agency - Operational Folder - Operational guide to the Safety Strategic Plan	Highways Agency

Ref	Publication	Published by / Available from
21	Agency Records Policy	Highways Agency
22	Performance Indicators Handbook	Highways Agency and is subject to on-going development. Contact: HA PM <a href="mailto:Team@highways.gsi.gov.uk">Team@highways.gsi.gov.uk</a> for latest version
23	Cultural Assessment Framework (CAF)	Highways Agency and is subject to on-going development. Contact: <a href="mailto:HA_PM_Team@highways.gsi.gov.uk">HA_PM_Team@highways.gsi.gov.uk</a> for latest version
24	Circular Roads	DfT Website (Current) Highways Agency (Archive)
25	Measures necessary where apparatus is affected by Major Works (Diversionary Works)	The Stationery Office, ISBN 0 11 551149 0
26	Routine Maintenance Management Systems Manual	The Stationery Office
27	Road Notes	The Stationery Office
28	Specification for the reinstatement of openings in highways.	The Stationery Office, Second Edition ISBN 0 11 552538 6
29	New Engineering Contract : Engineering and Construction Contract (3 <sup>rd</sup> Ed)	ICE, Great George Street, Westminster, London SW1P 3AA
30	ICE Conditions of Contract	ICE Great George Street Westminster London SW1P 3AA
31	Routine Maintenance Management Systems Manual	The Stationery Office
32	Value for Money Guidance Manual	The Stationery Office
33	Local Transport Notes	The Stationery Office
34	Highways Directives	DTLR
35	Highways Advice	DTLR
36	Traffic Control and Communications - Specifications	DTLR
37	Local Transport Notes	The Stationery Office

Ref	Publication	Published by / Available from
38	Guidance Notes	DTLR
39	Notes for Guidance for Engineers in connection with Trunk Road Schemes	DTLR
40	Signs Working Drawings Vols. 1 to 3	The Stationery Office
41	Specification Library (SPECLIB)	DTLR
42	Method of Measurement Library (MEMLIB)	DTLR
43	Design Manual for Roads and Bridges	The Stationery Office
44	Manual of Contract Documents for Highway Works	The Stationery Office
45	A New Deal for Transport: Better for Everyone. The Government's White Paper on the Future of Transport.	DTLR
46	Project Appraisal Report and Guidance Notes	Highways Agency <a href="http://www.roads.detr.gov.uk/roadnetwork/heta/hetapubs.htm">www.roads.detr.gov.uk/roadnetwork/heta/hetapubs.htm</a>
47	Direction 50 of the Traffic Signs Regulations & General Directions 1994	DTLR
48	Traffic Advisory Leaflets	DfT Website
49	HA Environmental Reports	Highways Agency
50	Pollution Prevention Guidelines	Environment Agency
51	Local and regional biodiversity action plans	Local authorities / :Local wildlife trusts
	<b>Legislative Documents / Publications / Codes of Practice etc.</b>	The Stationery Office
52	Highways Act 1980,	The Stationery Office
53	CDM Regulations.	The Stationery Office

Ref	Publication	Published by / Available from
54	Traffic Management Act 2004	The Stationery Office ISBN 0 10 541804 8
55	Traffic Signs Regulations and General Directions 2002	HMSO Website
56	New Roads and Street Works Act	The Stationery Office
57	Code of Practice for the Coordination of Street Works and Works for Road Purposes and Related Matters.	The Stationery Office
58	New Roads and Street Works Act 1991 Code of Practice for the Coordination of Street Works and Works for Road Purposes and Related Matters	The Stationery Office, Second Edition issued April 2001 ISBN 0 11 552310 3
59	New Roads and Street Works Act 1991 Code of Practice for Inspections	The Stationery Office, Second Edition ISBN 0 11 552541 6
60	Planning Policy Guidance Notes	Communities and Local Government <a href="http://www.communities.gov.uk">http://www.communities.gov.uk</a>
61	Planning Policy Statements	Communities and Local Government <a href="http://www.communities.gov.uk">http://www.communities.gov.uk</a>
62	"Safety at Street Works and Road Works A Code of Practice"	The Stationery Office, Issued February 2002, ISBN 0 11 551958 0
63	HSC Managing construction for health and safety Construction (Design and Management) Regulations 1994 Approved Code of Practice	HSG 224 HSE Books 2001 ISBN 0 7176 2139 1
64	Pollution Prevention Guidelines 1, 5, 6 and 8	
65	BS 7671:1992 Requirements for Electrical Installations. IEE Wiring Regulations 16 <sup>th</sup> Edition	
66	SI 1989:635 Electricity at Work Regulations	

Ref	Publication	Published by / Available from
67	BS 4444:1989 Guide to electrical earth monitoring and protective conductor proving	
68	BS 7430:1998 Code of Practice for Earthing	
69	SI 2002:2665 The Electricity Safety, Quality and Continuity Regulations 2002	
70	Guidelines 1, 5, 6 and 8.	
71	Highways Agency visual identity – Requirements for our suppliers	Highways Agency

#### 18.4 Amendments to General and Area Specific Documents

Table 18.4 contains a list of additional requirements and/or amendments to the documents listed in Tables 18.1 and 18.3.

**Table 18.4**

Ref	Document Title	Source	Amendment Details	Comments/Remarks
1	DMRB Volume 4 Section 1.  Part 3		Maintenance of Highway  Geotechnical Works.	
2	Highways Agency work site accident reporting guidance note		Defines work site accident  reporting requirements	Additional requirements.  Refer to Annex 13 HAWSAR
3	Highways Agency Energy  Procurement Strategy (EPS)		National Unmetered Energy Contract - Inventory Maintenance  Procedures - Notes for HA Area teams and Agents	
4	DMRB Vol. 3		BA 63/94 Appendix A –	

Ref	Document Title	Source	Amendment Details	Comments/Remarks
	Section 1 Part 5		Inspection of Highway Structures, A3 Outline Contents of Principal and Special Inspection Reports.	
5	Structures Management Information System (SMIS)		Changes to BD 62, 63 and BA 63. Structures Management Information System (SMIS) Interim Advice Note 38/01	
6	New Roads and Street Works Act 1991		New Roads and Street Works Act 1991 Guidance Note No 3 Issued 29 March 1999.	
7	Highways Agency Biodiversity Action Plan		Local biodiversity action plan	<b>[Note to Compiler: Area specific amendments to be adopted as appropriate]</b>
<b>DMRB</b>				
8	Traffic Officer Service Strip Plans		HA – refer to supplementary information	<b>[Note to Compiler: provide Area specific details, if applicable]</b>
9	TD35/06	DMRB 8.1.1	All-Purpose Trunk Roads MOVA System of Traffic Control at Signals	This Standard sets out the requirement to use MOVA at new traffic and refurbished traffic signal installations on all-purpose trunk roads. It supersedes TD 35/91
10	TA 12/07	DMRB 8.1.1	Traffic Signals on High Speed Roads <i>Northern Ireland Addendum applicable for use in Northern Ireland</i>	This Advice Note incorporates DfT Traffic Advisory Leaflet TAL 2/03 into the DMRB. It includes a description of Speed Assessment and Speed Discrimination techniques and how these should be applied.



Ref	Document Title	Source	Amendment Details	Comments/Remarks
11	TA15/07	DMRB 8.1.1	<p>Pedestrian Facilities at Traffic Signal Installations</p> <p><i>Northern Ireland Addendum applicable for use in Northern Ireland</i></p>	<p>This Advice Note incorporates DfT Traffic Advisory Leaflet TAL 5/05 into the DMRB. It sets out the measures which can be adopted to assist pedestrians to cross the carriageways in safety at signal-controlled junctions.</p>
12	TA 16/07	DMRB 8.1.1	<p>General Principles of Control by Traffic Signals</p> <p><i>Northern Ireland Addendum applicable for use in Northern Ireland</i></p>	<p>This Advice Note incorporates DfT Traffic Advisory Leaflet TAL 1/06 into the DMRB. It deals with the principles of signal control at road junctions and gives advice on the methods of signal control and display sequences to be used. Some advice is given on the choice of controller settings and methods of assessment and calculation. It also includes a glossary of traffic control terminology and a list of standard symbols recommended for use on traffic signal layout drawings.</p>
13	TD 24/97	DMRB 8.1.1	<p>All-Purpose Trunk Roads Inspection and Maintenance of Traffic Signals and Associated Equipment</p>	<p>This Standard sets out inspection and maintenance requirements for permanent traffic signals and associated equipment at junctions, emergency vehicle stations and signalled pedestrian crossings on all-purpose trunk roads. It supersedes TD 24/86 and Amendment No 1.</p>

Ref	Document Title	Source	Amendment Details	Comments/Remarks
14	TD 7/07	DMRB 8.1.1	Statutory Approval of Traffic Control Equipment  <i>Not applicable to Northern Ireland</i>	This Technical Direction describes the relationship between the statutory legislation and the Approvals process and introduces the enforcement policy.
15	TA 82/99	DMRB 8.1.1	The Installation of Traffic Signals and Associated Equipment	This Advice Note incorporates DETR Local Transport Note 1/98 into the DMRB. LTN 1/98 recommends the practices to be followed when installing traffic signals, signal controlled crossings and associated equipment. It also describes the installation of temporary signals, school crossing patrol signs and warning lights.
16	TA 84/06	DMRB 8.1.2	Code of Practice for Traffic Control and Information Systems for All-Purpose Roads  [Incorporating Correction dated February 2007]	This Advice Note is a primary reference document drawing attention to statutory requirements, relevant standards and advice notes contained in existing documentation and provides general information on good practice not fully covered in other documents.  This document also offers guidance through defining new practice and procedures associated with the safety aspects of a scheme and by reflecting good practice and principles that have been established by UK practitioners over the years. This document replaces TA 84/01 and

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				MCH 1813.
17	TA68/96	DMRB 8.5.1	The Assessment and Design of Pedestrian Crossings	Incorporates LTN 1/95 and LTN 2/95, into the DMRB. i.e. The Assessment of Pedestrian Crossings and The Design of Pedestrian Crossings produced by the Department of Transport.
18	TA 91/05	DMRB 5.2.4	Provision for Non-Motorised Users	This Advice Note provides guidance in relation to provision for non-motorised users, through the design and implementation of both on- and off- carriageway provision including crossings, junctions and general design considerations.
19	TD 50/04	DMRB 6.2.3	The Geometric Layout of Signal-Controlled Junctions and Signalised Roundabouts	This document sets out the design standards, methodology and good design practice for the geometric layout of signal-controlled junctions and signalised roundabouts for trunk roads. Measures to ensure safe operation for all road users are described.  TD 50/04 supersedes TD 50/99.
20	TA 86/03	DMRB 6.2.8	Layout of Large Signal Controlled Junctions	This Advice Note gives recommendations for the procedures for designing and assessing the performance of large traffic signal junctions. It is intended to supplement and be used in conjunction with <b>TD 50</b>

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				<b>(DMRB 6.2.3).</b> The Design Standard for The Geometric Layout of Signal Controlled Junctions and Signalised Roundabouts.
<b>Traffic Advisory Leaflets (TAL)</b>				
1	TAL1/01	DfT	Puffin Pedestrian Crossings	
2	TAL1/01	DfT	SCOOT Estimates of Emissions from Vehicles	
3	TAL1/02	DfT	The Installation of Puffin Pedestrian Crossings	
4	TAL1/06	DfT	General Principles of Traffic Control by Light Signals Part 1 of 4	
5	TAL 2/03	DfT	Signal-control at Junctions on High-speed roads*	
6	TAL3/97	DfT	The 'MOVA' Signal Control System	
7	TAL4/91	DfT	Audible and Tactile Signals at Pelican Crossings	
8	TAL4/98	DfT	Toucan crossing developments	
9	TAL5/91	DfT	Audible and Tactile Signals at Signal-Controlled Junctions	
10	TAL5/96	DfT	Further development of advanced stop lines	
11	TAL5/05	DfT	Pedestrian facilities at Signal-Controlled Junctions (parts 1-4)	
12	TAL7/99	DfT	The 'SCOOT' Urban Traffic Control	

Ref	Document Title	Source	Amendment Details	Comments/Remarks
			System	
13	TAL7/00	DfT	SCOOT Gating	
14	TAL8/99	DfT	Urban Safety Management using SafeNET	
15	TAL8/00	DfT	Bus Priority in SCOOT	
16	TAL 9/00	DfT	SCOOT Estimates of Emissions from Vehicles	
17	TAL10/93	DfT	'Toucan', an unsegregated crossing for pedestrians and cyclists	
18	TAL16/99	DfT	The Use of Above Ground Vehicle Detectors	
19	TAL6/01	DfT	Bus Priority	<b>[Note to Compiler:</b> Check if this is relevant to traffic signals]
<b>Local Transport Notes</b>				
	LTN 1/95	SO	The Assessment of Pedestrian Crossings ISBN 0-11-551625-5. The Stationery Office.	
	LTN 1/98	SO	The Installation of Traffic Signals and Associated Equipment	
	LTN 2/95	SO	The Design of Pedestrian Crossings.	
<b>MCS, MCE, MCH</b>				
	MCS 206	HA	List of Drawings, Specifications and	

Ref	Document Title	Source	Amendment Details	Comments/Remarks
			Instructions.	
	MCS 215		Traffic Signal Equipment On All Purpose Roads.	
	MCE 0108C	HA	Siting of Inductive Loops for Vehicle Detecting Equipment at Permanent Road Traffic Signal Installations.	
	MCH 1542		Installation Guide For MOVA	
	TR 2210A	HA	Specification For Traffic Signal Controller.	
	TR 2500	HA	Specification for Traffic Signal Controller	
<b>General</b>				
	TSRGD	SO	The Traffic Signs Regulations and General Directions	
<b>Miscellaneous</b>				
	MCX0476		Pedestrian Control Panel for Pelican Traffic Signals	
	MCX0476		Pedestrian Control Panel for Traffic Signals	
	MCX1017		Installation Drawing NMCS2 Ramp Metering -Traffic Signals and Backing Boards	
	TR0102		DTP Standard Traffic Signals	
	TR2206		Specification for Road Traffic Signals	
	TR2503		Performance	

Ref	Document Title	Source	Amendment Details	Comments/Remarks
			Specification for Pedestrian Facilities at Temporary Standalone Traffic Signals	
	TR2504		Performance Specification for Vehicle Detection Equipment for Vehicle Actuated Portable Traffic Signals	
	AP 1/2/3		Asset Management Process	
	AMM 55/08		Service Providers to provide information directly to the NTCC and NILO,	
	AMM 83/07		Network Occupancy Management Process Document	