

# Network Management Manual

## CONTENTS

### **PART 0 – INTRODUCTION**

### **PART 1 – MANAGEMENT OF HEALTH & SAFETY**

- 1.1 General Health and Safety
- 1.2 Main Legislation relating to Network Management
- 1.3 Roles and Responsibilities
- 1.4 Legislation Register
- 1.5 Standards, guidance and information
- 1.6 Accident and Incident reporting System

### **PART 2 – ASSET MANAGEMENT RECORDS**

- 2.1 Introduction to Network Management Information
- 2.2 Highways Agency Pavement Management System
- 2.3 Introduction to Section Referencing
- 2.4 Section Referencing Procedures
- 2.5 Cross Section Positions
- 2.6 HAPMS Data
- 2.7 Data Management
- 2.8 Pavement Condition Surveys
- 2.9 Visual Surveys (Flexible)
- 2.10 Visual Condition Surveys (VCS) on Concrete Surfaced Pavements
- 2.11 Machine Survey Pre-processor (MSP)
- 2.12 Records & Inspections of Highway Structures
- 2.13 Drainage Record & Inspections
- 2.14 Geotechnical Asset Information Management
- 2.15 Environmental Information System

### **PART 3 – ROUTINE SERVICE**

- 3.1 General
- 3.2 Paved Areas
- 3.3 Drainage
- 3.4 Geotechnical Asset Management
- 3.5 Structures
- 3.6 Tunnels
- 3.7 Road Restraint Systems
- 3.8 Highways Agency Traffic Management Systems (HATMS)
- 3.9 Road markings & Road studs
- 3.10 Road traffic signs
- 3.11 Road traffic signals
- 3.12 Lighting
- 3.13 Soft estate
- 3.14 Sweeping & cleaning
- 3.15 Fences, walls, screens, & environmental barriers
- 3.16 Retained litter clearing duties
- 3.17 The Landfill Directive & liquid waste
- 3.18 Environmental Implications of Maintenance Operations
- 3.19 Health & Safety Management within Depots
- 3.20 Identification of Workplace Hazards

## **PART 4 – TRAFFIC MANAGEMENT**

- 4.1 Chapter 8 of the Traffic Signs Manual & Notes for Guidance on ‘Safety at Road works’
- 4.2 Driver Information Signs at Road works
- 4.3 Design of Vehicle Recovery at Road works
- 4.4 Provision of Speed Cameras at Road works

## **PART 5 – WINTER SERVICE**

- 5.1 Introduction to Winter Service
- 5.2 Severe Weather Plan
- 5.3 Weather Information
- 5.4 Winter Service Route Planning
- 5.5 Anti-icing/De-icing materials
- 5.6 Techniques for Precautionary Treatment
- 5.7 Techniques for the Treatment of Snow and Ice

## **PART 6 – NETWORK OCCUPANCY MANAGEMENT**

- 6.1 Network Occupancy Management
- 6.2 Scheduled Road works
- 6.3 Temporary Traffic Signs –Special Events
- 6.4 Decriminalised Parking
- 6.5 Abnormal Load Routing & Management
- 6.6 Co-ordination of Works
- 6.7 NRSWA – Recovery of Inspection Fees
- 6.8 Motorway Passes
- 6.9 Optimising Traffic Management at Road works

## **PART 7 – TRAFFIC INCIDENT MANAGEMENT & CONTINGENCY PLANNING**

- 7.1 Incident Management – Introduction & Scope
- 7.2 Roles and Responsibilities
- 7.3 Definition of Incidents
- 7.4 Information and the Media
- 7.5 Communication, Command & Control, Coordination
- 7.6 Contingency Planning
- 7.7 Service Requirements
- 7.8 Debriefing
- 7.9 Service Standards and Requirements of Service Providers
- 7.10 Incident Support Units: Vehicles
- 7.11 Incident Support Units: Livery
- 7.12 Incident Support Units: Equipment
- 7.13 Health & Safety
- 7.14 Hazardous Waste
- 7.15 Reporting & Recording
- 7.16 Incident Investigation
- 7.17 Managing & Identifying Canine Fatalities
- 7.18 Rapid Re-opening of Running Lanes Following Diesel and other Hydrocarbon Spillages
- 7.19 Use of non-standard CCTV

## **PART 8 – BETTER INFORMATION FOR ROAD USERS**

- 8.1 General
- 8.2 Information to Road Users Toolkit

**PART 9 – INTENTIONALLY BLANK**

**PART 10 – PROGRAMME PLANNING & SCHEME DEVELOPMENT**

- 10.1 Programme Development
- 10.2 Scheme Development
- 10.3 Area Safety Action Plans

**PART 11 - ADMINISTRATION**

- 11.1 Claims for Damage to the Highways Agency's Road Network (Green Claims)
- 11.2 Claims against the Highways Agency by Third Parties (Red Claims)
- 11.3 Standards Improvement System (SIS)
- 11.4 IT & Systems.
- 11.5 Forecasting & Budget.
- 11.6 Road Safety Data Types & their Uses

**INTRODUCTION**

- (i) General**
- (ii) Definitions**
- (iii) Context**
- (iv) Parts**
- (v) Style of Presentation**
- (vi) Glossary of Terms**
- (vii) Departures from Standard**
- (viii) History - Origin of Chapters**
- (ix) Enquiries**

### Introduction

#### (i) General

This Network Management Manual (NMM) replaces Volumes 1 and 3 of the Trunk Road Maintenance Manual. It brings together extant policy from those two volumes together with current Area Management Memos and Network Security Notes. It provides advice, some mandatory instruction and guidance on good practice for the management and provision of the routine and winter service on the trunk road network. It generally describes the processes for the management of the maintenance service including the interface between the Highways Agency, its service providers and other stakeholders.

The performance requirements for routine and winter service activities on the trunk road network are included in the Routine and Winter Service Code, referred to as “the Code”, which is a replacement for Volume 2 of the Trunk Road Maintenance Manual. The Network Management Manual, which together with the Code, provides advice and guidance to enable the Service Provider to achieve the performance requirements.

#### (ii) Context

The Network Management Manual is predominantly guidance and advice, which is commended to users for consideration. However, there are also some mandatory requirements, arising from either statutory or contractual obligations.

Mandatory sections of this document are contained in boxes. The Service Provider must comply with these sections or obtain agreement to a Departure from Standard from the Highways Agency, see part (vi). It should be noted that due to formatting restrictions entire paragraphs have been highlighted where a only part of it is mandatory.

#### (iii) Parts

The Network Management Manual is in twelve Parts:

- Part 0 Introduction
- Part 1 Management of Health and Safety
- Part 2 Asset Management Records
- Part 3 Routine Service
- Part 4 Traffic Management
- Part 5 Winter Service
- Part 6 Network Occupancy Management
- Part 7 Traffic Incident Management
- Part 8 Better Information for Road Users
- Part 9 Network Resilience and Security
- Part 10 Programme Planning and Scheme Development
- Part 11 Administration

#### (iv) Style of Presentation

The Network Management Manual has been designed to enable partial revision with an amendment number and issue date at the bottom of the page. This assists in accurately recording updated and revised procedures on individual pages. These revisions are also recorded on the amendment summary pages which are issued at the same time. This system is intended to comply with formal quality assurance procedures.

## Introduction

---

Amendments (excluding minor typographical errors) are shown by a vertical bar in the left hand margin in addition to the change in version number shown at the bottom of each page. Such bars only show changes effected from the previous version.

The Highways Agency intends that the completed document is made available in an electronic only version on both the Highways Agency portal and the internet, which provides for easier access by service providers and stakeholders. The Highways Agency intends for the document to be updated as necessary to reflect current policy.

General enquiries about the Network Management Manual and its availability and content should be directed to the contacts shown in part (ix) below.

Within the Network Management Manual there are several standard forms that have been re-typed/drawn for clarity in publication. These specimen forms do not replace the existing forms currently used by both the Highways Agency's staff and Highways Agency's service providers.

### (v) Definitions

The following terms are used within the document and are applicable dependent upon the type of contract operating:

<b>Term</b>	<b>Definition</b>
Activity Promotion	The act of informing the Service Provider of the activities that are planned
Adverse Weather Report	Has the meaning given in Part 5 of the NMM
Annual Inspection	Has the meaning given in the DMRB
Area Schemes	Capital improvement schemes, such as LMNS, delivered through area maintenance contracts and including Service Provider 'managed schemes'.
Area Renewals	Renewal schemes delivered through area maintenance contracts and including Service Provider 'managed schemes'.
Approved Network	The Highways Agency's network, made up of consistently referenced Sections
Category 1 and Category 2 Defects	Have the meanings given in Part 2 of the Code
Confirm	Has the meaning given in Part 2 of the NMM
Contingency Plan	Has the meaning given in Part 7 of the NMM
Cyclical Maintenance	Has the meaning given in Part 4 of the Code
Database Administrator	A specialist resource that maintains the integrity of a database system.
Departure from Standard	The mechanism by which the Service Provide seeks to alter, amend or depart from the minimum standard set for design or maintenance standards
Design Build Finance & Operate	A contract with a Service Provider where the service includes assuming responsibility for the operation and maintenance of a length of existing road (where relevant) and ensuring that specified construction scheme(s) along the length of road are constructed and made available for road users. The Service

## Introduction

---

<b>Term</b>	<b>Definition</b>
	Provider is subsequently responsible for the operation and maintenance of the new sections of road.
Designer	Contracting agent responsible for carrying out design and construction activities for or on behalf of the Highways Agency. Includes Early Contractor Involvement (ECI) Agents or Design, Build, Finance, Operate (DBFO) Agents. Also refers to Network Management Agents undertaking renewals or improvement works.
Detailed Inspection	Has the meaning given in Part 3 of the NMM
Developer Works	All new development works including works under Section 278 and Section 38 of the Highways Act 1980 and any other permitted development works including works under the Town and Country Planning Act or the Transport Works Act
Environmental Element	Part of EnvIS Environmental inventory. Man-made or natural assets comprising the environment within and surrounding the trunk road network.
Environmental Information System	Consists of specific environmental data supplied by Service Providers, the Highways Agency and other bodies which is collated and displayed in the Highways Agency Geographical Information System (HAGIS). This data is used to assist managing the environment and in the review and reporting of the environmental performance of both Service Providers and the Highways Agency.
Environmental Management Information	Part of EnvIS. Specific data, to be recorded in and extracted from EnvIS, to assist in the identification, planning, implementation, monitoring and reporting of the environmental management of the trunk road network. Data includes that relating to commitment(s) and management actions associated with an Environmental Element
Environmental Management Plan	An EMP is a document (or set of documents), which set out agreed procedures and standards for the implementation of identified environmental management actions. It is developed to address the adverse and beneficial environmental impacts arising from planning and design, construction, and maintenance and operation of the trunk road network.
EnvIS Management Team	The focal point of contact for all Service Providers maintaining and supplying environmental data to EnvIS standards.
Environmental Objective	Part of EnvIS environmental inventory. Assigned to individual Environmental Elements and defines its overall purpose (what it is intended to achieve in environmental terms)

## Introduction

---

<b>Term</b>	<b>Definition</b>
Events	Planned off-network events that have the potential to impact on the operation of the Agency's network
Gateway (Business Information gateway)	Has the meaning given in Part 11 of the NMM
Geographical Information System	System used to input, store, retrieve, manipulate, analyse and output geographically referenced data. Key components of GIS are: <ul style="list-style-type: none"><li>– Computer system: consists of hardware, software and procedures designed to support data capture, processing, analysis, modelling and display.</li><li>– Geospatial data: can be represented spatially as points, lines or polygons which represent the geometry of topology, size, shape, position and orientation. Sources of geospatial data include digitised maps, aerial photographs, satellite images and statistical tables.</li><li>– Users: the roles of the user is to select pertinent information, to set necessary standards, to design cost-efficient updating schemes, to analyse GIS outputs for a relevant purpose and plan the implementation.</li></ul>
Geotechnical Advisor	Highways Agency member of staff responsible for providing advice on geotechnical matters
Geotechnical Asset Management Plan	Has the meaning given in Part 3 of the NMM
Geotechnical Liaison Engineer	Highways Agency member of staff responsible for liaising with the Service Provider / Service Manager
Ground Penetrating Radar	Ground-penetrating radar is a non-destructive tool that can be used to obtain information about the construction of a pavement and its internal features. Typically, ground radar can provide information about changes in pavement construction, layer thicknesses and defects and/or features within the pavement.
Hazard Mitigation	Has the meaning given in Part 4 of the Code
Hazard Mitigation Period	Has the meaning given in Part 4 of the Code
Health & Safety Executive	The organisation responsible for the inspection and enforcement of health, safety and welfare in the workplace
Health & Safety Plan	The document prepared in accordance with the CDM Regulations
Health & Safety File	The document prepared in accordance with the CDM Regulations
Highways Agency	The organisation responsible for the management of the trunk road and motorway network in England
Highways Agency Area Performance Team	Team who manage the day to day running and performance of the Network for the respective Area or DBFO
Highways Agency Geographical Information System	Graphical Information System (GIS) specifically developed and maintained by the Highways Agency

## Introduction

---

<b>Term</b>	<b>Definition</b>
Highways Agency Management Information System	A single platform for information for all Highways Agency Directories, from simple code look up utilities to more sophisticated forecasting and reporting tools.
Highways Agency Objective	Part of EnvIS environmental inventory. Set by the Highways Agency for particular environmental topics (e.g. air quality, nature conservation and ecology, etc) stating the Highways Agency's overall aims for the avoidance, minimisation or control of environmental impacts and enhancement of environmental conditions
Highways Agency's Road Weather Information Service	Has the meaning given in Part 5 of the NMM
Highways Agency Traffic Officer Service	Service provided by the Highways Agency to deal with incidents on the Network
Incidents	Unplanned traffic incidents including RTCs and ad-hoc road closures. This does not include Category 1 Defect repairs to infrastructure damage resulting from an incident
Interim Advice Notes	Documents issued from time to time formally amending DMRB or MCDHW standards
Licensee Works	Private works executed through grant of a licence or permission under the various sections of the Highways Act 1980 including such as skip licences, scaffold licences and permissions to plant or erect structures in the highway. This category also includes maintenance works undertaken by other bridge authorities such as; Network Rail and British Waterways
Location Referencing Point	Has the meaning given in Part 2 of the NMM
Long-Stop Condition Requirement	Has the meaning given in Part 2 of the Code
Machine Survey Pre-Processor	Software that validates TRACS, SCRIM and Deflectograph Raw Condition Data, fits the data to a survey route and outputs to a file for loading into HAPMS
Maintenance or Managing Agent	Has the meaning given in Part 4 of the Code
Major Schemes	Major infrastructure capital improvements, including TPI schemes and other discrete improvement schemes not covered by any of the following definitions: Area Schemes, Area Renewals, Routine Works, Urgent Routine Works, Regional Technology Schemes, Regional Technology Works, Urgent Regional Technology Works, Street Works, Urgent Street Works, Developer Works, Licensee Works, National Technology Works, Urgent National Technology Works, Events.
National Technology Works	Works executed by the national technology contractors (GTL and TiS) under the two national PFI technology contracts (NRTS and NTCC)

## Introduction

---

<b>Term</b>	<b>Definition</b>
Network	That part of the trunk road and motorway network covered by the Service Provider's contract.
Network Auditor	The individual who ensures that section referencing information is up-to-date
Network Control Centre	24/7 manned control room that deals with all incidents and customer care matters
Network Management Agent	Contracting agent responsible for managing and maintaining the trunk road network. Typically includes Managing Agent Contractors (MACs) or Design, Build, Finance, Operate (DBFO) Agents.
Network Occupancy Management Manual	Sets out the approach to managing the Network
Network Management Manual	Refers to this document
Network Referencing Manager	Has the meaning given in Part 2 of the NMM
Overall Requirement	Has the meaning given in Part 4 of the Code
Pavement Condition Surveys	Has the meaning given in Part 2 of the NMM
Performance Requirement	Has the meaning given in Part 4 of the Code
Permanent Repair	Has the meaning given in Part 4 of the Code
Preventative Maintenance	Has the meaning given in Part 4 of the Code
Principal Inspection	Has the meaning given in the DMRB
Project Sponsor	Highways Agency member of staff responsible for scheme or project
Road Safety Partnership	Has the meaning given in Part 4 of the NMM
Regional Environmental Advisor	Highways Agency member of staff responsible for liaising with the Service Provider / Service Manager. Regional environmental advisors provide operational support and advice to all Highways Agency Directorates on environment, accessibility, sustainable development and aspects of integration within their region. They advise on assessment, design, management and appraisal to help ensure compliance with legislation, policy and standards, in accordance with best value and sustainability.
Regional Technology Schemes	Discrete technology improvement and renewal schemes not delivered through regional term contracts or through national PFI contracts (NRTS and NTCC)
Regional Technology Works	Works delivered through the regional technology term maintenance contracts
Remote Monitoring System	A technique for detecting faults in an item of electrical equipment or subsystem, and reporting them to a remote point, such as a control centre.
Renewal Maintenance	Has the meaning given in Part 4 of the Code
Road Category	Has the meaning given in Part 4 of the Code

## Introduction

---

<b>Term</b>	<b>Definition</b>
Route Performance Manager	Highways Agency member of staff responsible for the performance and management of a particular route
Routine Maintenance Management System	Management procedures for the routine maintenance of highways which allows all inspections and other reports, complaints and third party claims to be assessed in conjunction with the established highway inventory, previous maintenance actions and other relevant data
Routine Works	Routine maintenance works delivered through area maintenance contracts including all routine and cyclic work and ad-hoc defect repairs. This includes any routine activities that are not covered by any other category in this list, undertaken by third parties operating on behalf of the Highways Agency (such as machine surveys and site investigation works). This category also includes EPA activities undertaken by district and unitary authorities.
Safety Camera Partnership	Has the meaning given in Part 4 of the NMM
Safety Inspection	Has the meaning given in Part 3 of the NMM
Safety Patrol	Has the meaning given in Part 3 of the NMM
Scheduled Roadworks (SRW)	A module of HAPMS - The system consists of a database and a browser-based interface for the recording of lane closures on the network.
Section Referencing	Has the meaning given in Part 2 of the NMM
Section Reference Marker	Has the meaning given in Part 2 of the NMM
Service Manager	Has the meaning given in Part 4 of the Code
Service Provider	Has the meaning given in Part 4 of the Code
Severe Weather Plan	Has the meaning given in Part 5 of the NMM
Sideway-force Coefficient Routine Investigation Machine (SCRIM)	A mobile machine survey that records resistance to skidding in the wet.
Soft Estate	All areas of the highway outside of the road pavement within the ownership of the Secretary of State (some of which may be outside the operational fence line)
Statutory Undertaker (or Undertaker)	Means an undertaker for the purposes of Part III of the New Roads and Street Works Act 1991 as defined in Section 48(4) of that Act.
Street Works	Statutory undertaker works including works executed under a New Roads & Street Works Act 1991, Section 50 Licence
Structure Maintenance Manual	Has the same meaning as Maintenance Manual given in Part 1 of Volume 3 of the DMRB
Technical Area	Has the meaning given in Part 4 of the Code
Temporary Traffic Regulation Orders	Orders that are put in place to restrict speed limits or access to the Network e.g. road closures

## Introduction

---

<b>Term</b>	<b>Definition</b>
Traffic Operations Contract Compliance Audit	The mechanism whereby Service Provider's performance is measured annually
Traffic-speed Condition Surveys (TRACS)	A generic term that describes the required surveys of pavement surface condition
Urban Traffic Control System	A system for the central control of electronic traffic control devices in a defined area which usually comprise primarily, but not necessarily exclusively, traffic signal installations.
Urgent National Technology Works	Urgent works executed by the national technology contractors (GTL and TiS) under the two national PFI technology contracts (NRTS and NTCC)
Urgent Regional Technology Works	Urgent works delivered through the regional technology term maintenance contracts (specifically, the repair of category 1 defects)
Urgent Routine Works	Urgent routine maintenance works delivered through area maintenance contracts (specifically, the repair of category 1 defects)
Urgent Street Works	Urgent or Emergency statutory undertaker works including works executed under a New Roads & Street Works Act 1991, Section 50 Licence
WebDAS	The web-based system for submitting and seeking approval Departures from Standard
Wider Road Safety Partnership	Has the meaning given in Part 4 of the NMM
Winter Maintenance Officer (& Assistant)	Highways Agency member of staff responsible for Winter Maintenance in the Route Performance Team
Winter Period	Has the meaning given in Part 5 of the NMM
Winter Service Plan	Superseded by Severe Weather Plan
Winter Service Routes	Has the meaning given in Part 5 of the NMM
Winter Risk Period	Has the meaning given in Part 5 of the NMM

### (vi) Glossary of Terms

The following is a list of abbreviations are referred to in this manual.

#### Acronym

AA	Agent Authority
AADT	Annual Average Daily Traffic
ABP	Agricultural By-Product
ACPO	Association of Chief Police Officers
AIL	Abnormal Indivisible Loads
AFR	Accident Frequency Record
AMM	Area Management Memorandum
ANPR	Automatic Number Plate Recognition
APM	Area Performance Manager
APT	Area Performance Team
APTR	All Purpose Trunk Road
ASLEC	Association of Street Lighting & Electrical Contractors
ASR	Alkali Silica Reaction

## Introduction

---

### Acronym

AVD	Average Vehicle Delay
AW	Authorised Weight
BCD	Base Condition Data
BE	Bridges Engineering Division
BOD	Biological Oxygen Demand
BS	British Standard
CCTV	Closed Circuit Television
CD	Compact Disc
CDM	Construction (Design & Management) Regulations
CHART	Computerised Highway Assessment of Ratings & Treatments
CHE	Chief Highway Engineer
CHIP	Chemicals (Hazard Information & Packaging for Suppliers) Regulations
CIS	Construction Industry Scheme
CLAW	Control of Lead at Work Regulations
COPI	Code of Practice for Inspections
COSHH	Control of Substances Hazardous to Health
CPR	Civil Procedure Rules
CRCP	Continuously Reinforced Concrete Pavement
CSS	County Surveyors Society
C&U	The Road Vehicles Construction and Use Regulations
DA	Design Agent
DBA	Database Administrator
DBFO	Design Build Finance & Operate
DCD	Data Collection Devices
DCP	Dynamic Cone Penetrometer
DD	Divisional Director
DDA	Disability Discrimination Act
DEFRA	Department for Environment Food and Rural Affairs
DFS	Departure from Standard
DMRB	Design Manual for Roads & Bridges
DSE	Display Screen Equipment
DSEAR	Dangerous Substances & Explosive Atmospheres Regulations
DfT	Department for Transport
EA	Environment Agency
EAV	Exposure Action Value
EC	European Commission
ELV	Exposure Limit Value
EMAC	Enhanced Managing Agent Contractor
EMP	Environmental Management Plan
EMT	EnvIS Management Team
EnvIS	Environmental Information System
EPA	Environmental Protection Act 1990
ERT	Emergency Roadside Telephone
ESDAL	Electronic Service Delivery for Abnormal Loads
FS	Financial Services
FCEC	Federation of Civil Engineering Contractors
FWD	Falling Weight Deflectometer

## Introduction

---

### Acronym

FPA	Fire Precautions Act
FPG	Forward Planning Guidance
GAMP	Geotechnical Asset Management Plan
GTL	
(GeneSYS)	GeneSYS Telecommunications Ltd
GIS	Geographical Information System
GLE	Geotechnical Liaison Engineer
GNN	Government News Network
GPR	Ground Penetrating Radar
GPS	Global Positioning System
HA	Highways Agency
HAB	Highways Agency Board
HABAP	Highways Agency Biodiversity Action Plan
HAGIS	Highways Agency Geographical Information System
HAMIS	Highways Agency Management Information System
HAPMS	Highways Agency Pavement Management System
HADDMS	Highways Agency Drainage Data Management System
HAGDMS	Highways Agency Geotechnical Data Management System
HAIL	Highways Agency Information Line
HAMIS	Highways Agency Management Information System
HAPMS	Highways Agency Pavement Management System
HA RDI Guidance	Highways Agency Road Death Investigation Guidance
HAST	Highways Agency Pavement Management System Support Team
HATMS	Highways Agency Traffic Management Systems
HATO	Highways Agency Traffic Officer
HAUC	Highway Authorities and Joint Utilities Committee
HDA	Heavy Duty Alloy
HGV	Heavy Goods Vehicle
HRM	High Speed Road Monitor
HSC	Health and Safety Commission
HSE	Health & Safety Executive
HSWA	Health & Safety at Work Act
ICF	Investment Control Framework
IPV	Impact Protection Vehicle
IAN	Interim Advice Note
ID	Identification Number
ILE	Institution of Lighting Engineers
IMT	Incident Management Team
IPV	Impact Protection Vehicles
IRRRS	Interim Requirements for Road Restraint Systems (Vehicle & Pedestrian)
ISBN	International Standard Book Number
ISDN	Integrated Services Digital Network
ISU	Incident Support Unit
IT	Information Technology
KCI	Key Contract Indicators
KPI	Key Performance Indicators

## Introduction

---

### Acronym

LA	Local Authority
LHA	Local Highway Authority
LNMS	Local Network Management Scheme
LOLER	Lifting Operations & Lifting Equipment Regulations
LPG	Liquefied Petroleum Gas
LRP	Location Reference Point
LSCR	Long-Stop Condition Requirement
MA	Managing Agent
MAC	Managing Agent Contractor
MCC	Mobile Carriageway Closure
MCDHW	Manual of Contract Documents for Highway Works
MHSWR	The Management of Health and Safety at Work Regulations
MIC	Monthly Inspection Checklist
MIDAS	Motorway Incident Detection and Automatic Signalling
MP	Major Projects
MPD	Mean Depth Profile
MPML	Management Plan Monitoring Line
MSP	Machine Survey Pre-processor
MSU	Ministerial Submission Unit
NAM	Network Access Manager
NAR	Network Access & Resilience Team
NCC	Service Provider's Network Control Centre
NDR	Network Data Repository
NetServ	Network Services
NFG	Notes for Guidance
NGF	National Guidance Framework
NGR	National Grid Reference
NGSHW	Notes for Guidance on the Specification for Highway Works
NHS	National Health Service
NIS	Network Information System
NILO	National Incident Liaison Officer
NJUG	National Joint Utilities Group
NMA	Network Management Agent
NMCS	National Motorway Communication System
NMM	Network Management Manual
NO	Network Operations (replaces Traffic Operations)
NOG	Network Operations Group
NOM	Network Operations Manager
NPM	Network Performance Manager
NRM	Network Referencing Manager
NRMCS	National Road Maintenance Condition Survey
NRT	Network Resilience Team
NRTS	National Roads Telecommunications Services
NRSWA	New Roads & Street Works Act
NS	Network Strategy
NSN	Network Security Notes
NTO	Night Time Only Working

## Introduction

---

### Acronym

NTCC	National Traffic Control Centre
NUNS	New User Name System
NVQ	National Vocational Qualification
NVS	Network Visual Survey
OECD	Organisation for Economic Co-operation and Development
OIC	Officer In Charge
OLA	Occupiers Liability Act
OSGR	Ordnance Survey Grid Reference
O&M	Operation & Maintenance
PAR	Project Appraisal Report
PFI	Private Finance Initiative
PIN	Project Identification Number
PI	Principal Inspection
PM	Project Manager
POPE	Post Opening Project Evaluation
PPE	Personal Protective Equipment
PQ	Parliamentary Question
PS	Project Sponsor
PSA	Public Service Agreement
PPOWER	Provision and Use of Work Equipment Regulations
PVS-f	Pavement Visual Survey – flexible
QA	Quality Assurance
QRC	Quarterly Review Checklist
RCC	Regional Control Centre
RCD	Raw Condition Data
RD	Regional Director
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
RIF	Roads Information Framework
RIU	Regional Intelligence Unit
RNAR	Regional Network Access & Resilience
ROB	Regional Operations Board
RPPT	Regional Planning & Performance Team
RRS	Road Restraint System
RST	Road Surface Temperature
RTC	Road Traffic Collision
RWIS	Road Weather Information System
R&WSC	Routine & Winter Service Code
SAG	Safety Advisory Group
SCRIM	Sideway-force Coefficient Routine Investigation Machine
SCG	Strategic Co-ordinating Group
SCSR	Safety Committees and Safety Representatives Regulations
SDP	Service Delivery Points
SfM	System for Management
SIS	Standards Improvement System
SM	Service Manager
SMIS	Structures Management Information System
SMTD	Sensor Measured Texture Depth

## Introduction

---

### Acronym

SO	Special Order
SP	Service Provider
SRT	Skid Resistance
SRW	Scheduled Road works
SSR	Network Services – NetServ (replaces Safety Standards and Research)
SSSI	Site of Special Scientific Interest
STATS19	Statistics on Personal Injury Road Accidents
STGO	The Road Vehicles (Authorisation of Special Types) General Order Regulations
SVB	Solid Vertical Barrier
SWEEP	System for the Whole-life Economic Evaluation of Pavements
SWL	Safe Working Load
TASCAR	Temporary Automatic Speed Cameras at Road works
TechMAC	Technology Managing Agent Contractor
TCC	Traffic Control Centre
TIM	Traffic Incident Management
TIML	TIM Lesson Learning Workstream Leader
TiS	Traffic Information Services
TMC	Term Maintenance Contractor
TMSRW	Traffic Management and Safety at Road works team
TMU	Traffic Monitoring Unit
TO	Network Operations - NO (replaces Traffic Operations)
TOAS	Traffic Operations Actions Spreadsheet
TOCCA	Traffic Operations Contract Compliance Audit
TOS	Traffic Officer Service
TPC	Third Party Claims team
TPI	Targeted Programme of Improvements
TPO	Tree Preservation Order
TRACS	Traffic-speed Condition Surveys
TRL	Transport Research Laboratory
TRMM	Trunk Road Maintenance Manual
TSC	Thin Surface Course
TSM	Traffic Signs Manual
TSRGD	Traffic Signs Regulations and General Directions
TSM	Traffic Signs Manual
TTRO	Temporary Traffic Regulation Orders
UKAS	United Kingdom Accreditation Scheme
VAC	Video Access Control
VCS	Visual Condition Survey
VM	Value Management
VMS	Variable Message Sign
VRN	Vehicle Registration Number
WEBDAS	Web-based Departures Approval System
WMO	Winter Maintenance Officer
WRC	Water Research Council
WRF1	Winter Maintenance Reporting System
WS	Winter Service
XSP	Cross Section Position

### Departures from Standard

All departures from standard must be submitted through the Highways Agency's WebDAS system. Users must have a New User Name System (NUNS) account and need to request either read only, create or reviewer levels of access from the WebDAS team as appropriate.

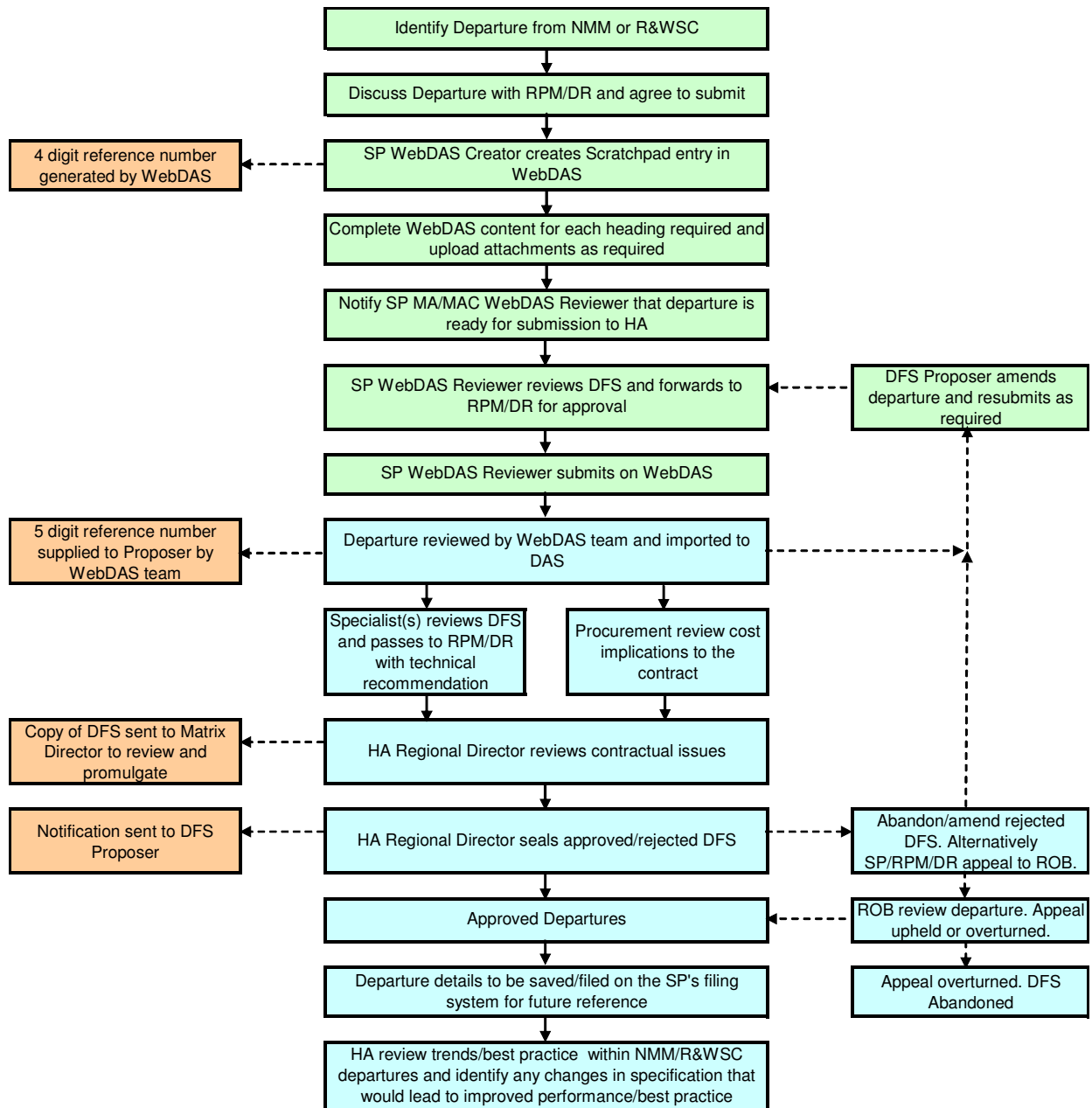
WebDAS can be accessed using the following link: <http://10.222.254.102/login.aspx> The WebDAS team can be contacted as follows: email: [WebDAS@highways.gsi.gov.uk](mailto:WebDAS@highways.gsi.gov.uk) Tel: 01234 796624 or 01234 796658.

Departures must be submitted in accordance with the latest version of the Departures Submission Guidance which can be downloaded from the WebDAS website.

When prompted to enter the Project Sponsor's name for the departure, the corresponding Route Performance Manager must be entered for the route for which the departure is requested.

Departures typically take 6-8 weeks to process (without guarantee of approval). The process is outlined in the following flowchart.

# Introduction



## Definitions

DFS = Departure from Standard  
 WebDAS = Web-based Departures Approval System  
 SP = Service Provider  
 RPM = Route Performance Manager  
 DR = Divisional Representative  
 ROB = Regional Operations Board

## Key

Input required by SP  
 Input required by HA  
 Output

(viii) History - Origin of Chapters

<b>TRMM Volume 1</b>		
<b>Chapter</b>	<b>Title</b>	<b>Comment</b>
1.1	Chapter 8 and Safety at Road works	Included - Chapter 4.1
1.2	Optimising traffic management at road works	Included - Chapter 6.1
1.3	Light vehicle recovery at road works	Included - Chapter 4.3
1.4	Provision of speed cameras at road works	Included - Chapter 4.4
2.1	Introduction to NIS	EXCLUDED - Obsolete
2.2	Access via NIS terminals	EXCLUDED - Obsolete
2.3	NIS referencing system	EXCLUDED - Obsolete
2.4	CHART network records	EXCLUDED - Superseded by AMM37
2.5	CHART network maintenance procedures	EXCLUDED - Superseded by AMM37
2.6	NIS Site Data Collection Systems	EXCLUDED - Obsolete
2.7	NIS IHMS1 (TR&M Maintenance Expd.)	EXCLUDED - Obsolete
2.8	NATS Programs using access via NIS	EXCLUDED - Obsolete
2.10	IHMS2/3 (TR&M highway assessm't data)	EXCLUDED - Obsolete
3.1	Maintenance assessment surveys	EXCLUDED - Superseded by AMM37
3.2	HRM surveys	EXCLUDED - Superseded by AMM37
3.3	CHART surveys	EXCLUDED - Superseded by AMM37
3.4	VCS on concrete pavements	EXCLUDED - Superseded by AMM37
3.5	Deflectograph surveys	EXCLUDED - Superseded by AMM37
3.6	SCRIM surveys	EXCLUDED - Superseded by AMM37
4.1	Records & inspections of structures	Included - Chapter 2.12
4.2	Fifteen Year Rehab Programme	EXCLUDED – Obsolete
5.1	Financial Instructions for Local Authorities	EXCLUDED – Obsolete
5.2	Financial Instructions for Consultants	EXCLUDED – Obsolete
5.3	Claims for damage to Department's property	Included - Chapter 11.1
5.4	Tendering procedures	EXCLUDED - Obsolete
5.5	Lane rental type contracts	EXCLUDED - Obsolete
5.6	Competition in provision of LA services	EXCLUDED - Obsolete
5.7	Implementation of part III of NRSWA	EXCLUDED - Obsolete
6.1	Co-ordination of design and works	Included - Chapter 6.6
<b>TRMM Volume 2</b>		
<b>Chapter</b>	<b>Title</b>	<b>Comment</b>
1.12	Sweeping and Cleaning	Included - Chapter 3.14
<b>TRMM Volume 3</b>		
<b>Chapter</b>	<b>Title</b>	<b>Comment</b>
	Introduction	EXCLUDED - Obsolete
1.1	Health & Safety management in compounds	Rewritten – 3.19
1.2	Identification of workplace hazards	Rewritten – 3.20
1.3	CDM Regulations	Rewritten – 1.1

## Introduction

Area Management Memos				
No	Title	Issued	Notes	Action
1	<i>Local Biodiversity Action Plans</i>	7/06/ 99	<i>Withdrawn</i>	
2	Temporary Direction Signing – Special Events	9/06/99		Included - in Chapter 4.2
3	Certificates of Completion	17/06/99		Highways Agency Internal circulation only
4	Computer Charges	17/06/99		Highways Agency Internal circulation only
5	NRSWA – Recovery of Inspection Fees from Statutory Undertakers	13/07/99		Included - in Chapter 6.7
6	<i>Routine Maintenance Management System</i>	24/09/ 99	<i>Withdrawn</i>	
7	<i>New Invoice Coding Requirements for Construction Industry Scheme (CIS)</i>	30/09/ 99	<i>Excluded Obsolete</i>	-
8	Application for Payment/Requests for Payment	3/11/99		Highways Agency Internal circulation only
9	Policy Statement on VMS	5/11/99		Highways Agency Internal circulation only
10	Detrunking – Transfer of Routine Maintenance Resources to LAs	5/11/99		Highways Agency Internal circulation only
11	<i>Winter Maintenance of Cycleways and Footpaths</i>	6/12/99	<i>Withdrawn</i>	
12	<i>Financial Year End Payment</i>	7/02/00	<i>Withdrawn</i>	
13	<i>Special Inspection of Pre- 1986 Road Studs</i>	17/02/00	<i>Withdrawn</i>	
14	Advice on Environmental Implications of Maintenance Operations	1/03/00		Included - in Chapter 3.18
15	<i>Detrunking/Virtual Detrunking Guidance</i>	31/03/00	<i>Replaced by No.20</i>	
16	<i>Environment Database – Data Collection Requirements</i>	20/06/00	<i>Superseded by DMRB Vol 10, Section 0</i>	
17	<i>Winter Maintenance in Low Humidity Weather Conditions</i>	26/09/00	<i>Replaced by No. 27</i>	
18	<i>RMMS – Amendment Set V111 Updates</i>	13/12/00	<i>Withdrawn</i>	
19	Decriminalised Parking	26/01/01		Included - in Chapter 6.4
20	<i>Detrunking/Virtual Detrunking Guidance</i>	13/02/01	<i>Replaced No.15</i>	
21	<i>Non-Motorised User Crossing Surveys</i>	5/03/01	<i>To be withdrawn</i>	
22	<i>Programme Development</i>	6/03/01	<i>Replaced by No.29</i>	
23	<i>Continuous Value Management</i>	18/04/ 01	<i>Replaced by No. 30</i>	
24	<i>Continuous Value Management</i>	10/05/01	<i>Replaced by No. 31</i>	

## Introduction

Area Management Memos				
No	Title	Issued	Notes	Action
25	De-Trunking- Transfer of Records	18/06/01		Highways Agency Internal circulation only
26	Reduction in Salt Grain Size	28/09/01		Review data from RWSC now inc in NMM
27	Revised Winter Maintenance in Low Humidity Weather Conditions	28/09/01		Review data from RWSC now inc in NMM
28	<i>Changes to TRMM Vol 1 to update advice on use of HAPMS applications for the maintenance of Trunk Roads</i>	21/02/02	Replaced by No. 37	
29	<i>Programme Development Programme Objectives Guidance</i>	27/03/ 02	Replaced No 22 Replaced By No 32	
30	<i>Programme Development Guidance</i>	27/03/02	Replaced No 23 Replaced by No 38	
31	<i>Value Management – Maintenance &amp; Making Better Use Projects</i>	27/03/02	Replaced No 24 Replaced by No 33	
32	<i>Programme Development Programme Objectives Guide</i>	10/04/02	Replaced No 29 Replaced by No 38	
33	<i>Value Management – Maintenance &amp; Making Better Use Projects</i>	16/04/02	Replaced No. 31. Replaced by No 38	
34	Winter Maintenance in Low Temps Combined with Low Humidity Conditions	19/09/02		Review data from RWSC now inc in NMM
35	De-Icing & Snow Clearance within Traffic Calmed Areas	19/09/02		Review data from RWSC now inc in NMM
36	Winter Maintenance of Thin Wearing Courses	14/11/02		Review data from RWSC now inc in NMM
37	<i>Changes to TRMM Vol 1 to update advice on use of HAPMS applications for maintenance of trunk roads.</i>	17/01/03	Replaced No 46	
38	<i>Programme Development</i>	17/03/03	Replaced by No 44	
39	Incident Support Units	28/04/03		Included - in Part 7
40	<i>Control of Ragwort &amp; other injurious weeds</i>	15/07/03	Replaced by No 48	
41	Winter maintenance operations	13/08/03		Included –in Chapter 5
42	<i>Winter service for footways &amp; cycleways</i>	15/10/03	Replaced by No 50	

## Introduction

Area Management Memos				
No	Title	Issued	Notes	Action
43	Prioritisation of noise mitigation sites	18/12/03	Replaces CHE 72/99	Not included
44	<i>Programme Development</i>	18/03/04	Replaces No 38	No longer included (Ch 7)
45	Waste Management - Landfill Directive & Liquid Waste	28/04/04		Included – in Chapter 3.17
46	Changes to TRMM Vol 1 to update advice on use of HAPMS applications for maintenance of trunk roads.	30/04/04	Replaces No 37	Included - in Chapters 6.2, 2.1-2.11
47	Value Management Guidance for Small Works and Non-pavement Renewals	06/05/04	Addendum to No 44	Not included (see No 44)
48	Control of Ragwort and Injurious Weeds	16/06/04	Replaces No 40	Included - in Chapter 3.13
49	Winter Service Plan Template	03/08/04		Included – in Chapter 5.2
50	<i>Winter Service for Footways &amp; Cycletracks</i>	03/08/04	Replaced by No.61	
51	Provision of Mutual Aid Arrangements	03/08/04		Included – in Chapter 5.4
52	Use of cones at damaged safety fence	19/11/04		Included – in Chapter 3.7
53	<i>Withdrawn – replaced by 55/04</i>	15/10/04	Replaced by No 55	
54	Critical Incident Reporting	26/10/04		Not included – advice of tel. number only
55	<i>Winter Notification &amp; Reporting Arrangements 2004/05</i>	26/11/04	Replaced by No.65	
56	Inspection of Utility Works Under New Roads & Streetworks Act	05/01/05		Included – in Chapter 6.7
57	Post Incident De-brief Arrangements Guidance Document	05/01/05		Included – in Part 7
58	Network Information Exchange with the National Traffic Control Centre	20/01/05		Included – in Chapter 6.2
59	<i>Forward Programming Guidance</i>	08/04/05	Replaces No 44 Replaced by No 72	No longer included (Ch 7)
60	Prevention of Objects falling from Highways Agency Structures	16/05/05		Included – in Chapter 1.3.1 & 1.4
61	<i>Winter Service Plan Template</i>	26/05/05	Replaced by No.74	
62	Dealing with Freezing Rain	02/08/05		Included – in Chapter 5.7
63	<i>Salt Stock Level Monitoring</i>	02/08/05	Replaced by No.76	Included – in Chapter 5.1
64	Dealing with Fluid & Gas Build-up in Heavy Duty Alloy Aluminium Parapets	05/09/05		Included – in Chapters 3.5 & 3.7
65	Winter Notification & Reporting Arrangements 2005/06	01/10/05	Replaces No.55	Included – in Chapters 5.2 & 5.5
66	Maintenance Responsibilities in relation to the NTCC	01/10/05		Included – in Chapter 3.8.3

## Introduction

Area Management Memos				
No	Title	Issued	Notes	Action
67	Managing & Identifying Canine Fatalities	18/11/05	Re-issued 18/01/08	Included – in Chapter 7.17
68	Lane Restrictions at Barrier Repairs	10/01/06		Included – in Chapter 3.7
69	Policy on Snow Plough Height Settings	20/02/06		Included – in Chapter 5.7
70	Post-Incident Cold Debrief Process	18/05/06		Included – in Part 7
71	Off Network Tactical Diversion Routes	02/06/06		Included – in Chapter 7.6.4
72	Forward Planning Guidance	08/06/06	Replaces No 59	Included – in Chapter 10.1
73	Sequentially Flashing Danger Lamps	14/06/06		Included – in Chapter 4.1
74	<i>Winter Service Plan Template</i>	<i>03/07/06</i>	<i>Replaced by 88</i>	
75	<i>Winter Briefings for Traffic Officers</i>	<i>06/09/06</i>	<i>Replaced by 90</i>	
76	Strategic Salt Stock Monitoring	06/09/06	Replaces No.63	Included – in Chapter 5.1
77	<i>Winter &amp; Business Continuity Reporting Arrangements 06/07</i>	<i>25/09/06</i>	<i>Replaced by 91</i>	
78	Disability Discrimination Act: Audit of the Network	16/10/06		Not included
79	Roadworks Safety Camera Costs – April 07 onwards	24/11/06		Included – in Chapter 4.4
80	Prevention of objects being thrown at traffic	11/12/06		Included – in Chapter 3.5
81	Development of Reserve Winter Fleet	12/12/06	Replaces Annex A.16 of Winter Service Plan	Included – in Chapter Annex 5.2.1
82	Use of speed and red-light cameras for traffic enforcement: Guidance on deployment, visibility and signing	01/03/07		Included – in Chapter 4.4
83	Network Occupancy Management Process	09/03/07		Included – in Chapter 6.1
84	Mitigating Delays arising from Street Works	09/03/07		Included – in Chapter 6.1.9
85	Design and Installation of the HA's Transmission Networks by the National Roads Telecommunications Service Contractor	23/04/07		Included – in Chapter 3.8
86	Service Provider Contingency Planning Template & Guidance	24/04/07		Included – in Chapter 7.6
87	Wider Road Safety Partnership Guidance	24/04/07		Included – in Chapter 4.4
88	Winter Service Plan Template - 2007/08	10/07/07	<i>Replaces No. 74 Replaced by 101</i>	
89	Snow Clearance Adjacent to Solid Vertical Barriers	10/07/07		Included – in Chapter 5.7

## Introduction

Area Management Memos				
No	Title	Issued	Notes	Action
90	Winter Service Briefings for the Traffic Officer Service	10/07/07	<i>Replaces No. 75 Replaced by 102</i>	
91	Winter and Business Continuity Reporting Arrangements	10/07/07	Replaces No. 77	Included – in Chapter 5.1
92	Network Occupancy Management – Supplementary Instruction	10/07/07	Supplement to No. 83	Included – in Chapter 6.1
93	Salt Loading Hoppers	18/07/07	Instructed one off emergency measures	Not included
94	Emergency Customer Welfare (ECW)	01/10/07		Included – in Chapter 7.1
95	Rapid Re-opening of Running Lanes Following Diesel and other Hydrocarbon Spillages	04/12/07		Included – in Chapter 7.18
96	The Reporting of Supply Chain Incidents	18/01/08	Re-iterates requirements at Chapter 1.5	Not included
97	Gathering Of Summary Supply Chain Incident Data	28/03/08	<i>Replaced by No. 105</i>	
98	Road Safety Data Types and their Uses	28/03/08	<i>Replaced by No. 107</i>	
99	Use of non-standard CCTV	14/05/08		Included - in Chapter 7.19
100	Review of the implementation of Geotechnical Asset Management requirements and the production of Geotechnical Asset Management Plans	21/05/08		Included - in Chapter 3.4
101	Severe Weather Plan Template 2008/9	17/06/08	<i>Replaces No. 88 Replaced by No. 109</i>	
102	Winter Service and Severe Weather Briefings for the Traffic Officer Service	17/06/08	Replaces No. 90	Included - in Chapter 5.1.4
103	Snow Desk Exercises – 2008/09	03/07/08		Not included
104	The Management of Sub-Standard, Concrete Half Joint and Hinge Deck Structures	21/07/08		Included – In Chapter 3.5
105	The Reporting of Supply Chain Accidents	10/10/08	Replaces No. 97	Included - in Chapter 1.6
106	Abnormal Indivisible Loads (AIL) Special Order (SO) Process Improvements	22/10/08		Included - in Chapter 6.5
107	Road Safety Data Types and their Uses	09/02/09	Replaces No. 98	Included – in Chapter 11.6
108	Interim Update of the March 2007 Value Management Guidance for LNMS	24/04/09		Included - in Chapter 10.2.5
109	Severe Weather Plan Template – 2009/10	26/06/09	Replaces No. 101	Included - in Chapter 5

## Introduction

---

Network Security Notes				
No	Title	Issued	Notes	Action
1	Introduction of NSN System	from 1997	<i>Replaced by NSN 9 -18</i>	
2	Identification of “Key Targets”			
3	RNCS Response to Incidents			
4	Making Contact with the Police			
5	Security at Works Sites			
6	Procedure to Follow if You Receive a Bomb Threat by Phone			
7	Communications During Security Alerts			
8	unpublished			
9	Network Security Notes	06/12/02	<i>Superseded by contingency planning arrangements</i>	Included - in Chapter 9.1
10	Definition of a major incident	06/12/02		
11	Role and Responsibilities of the Highways Agency in Emergency Planning	06/12/02		
12	Role and Responsibilities of others in Emergency Planning	06/12/02		Included - in Chapter 9.2
13	How major incidents are managed	06/12/02		
14	The response of the Highways Agency	06/12/02		Included - in Chapter 9.3
15	Information and the media	06/12/02		
16	Contingency planning – the principles	06/12/02		
17	Contingency planning – preparing a plan	06/12/02		
18	Emergency planning exercises	06/12/02		

### (ix) Enquiries

Enquiries and comments regarding the subject matter of the Network Management Manual should be made to:

Highways Agency  
 Network Services, Network Management Policy Team  
 City Tower  
 Piccadilly Plaza  
 MANCHESTER M1 4BE

(Telephone 0161 930 5738)