

Haringey Council

Agenda item:

[No.]

Overview and Scrutiny

4th October 2010

Report Title: Winter Service Plan

Report of : Niall Bolger, Director of Urban Environment

Signed :

N Bolger . 15th Sept. 2010.

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Wards(s) affected: All

Report for: Key Decision

1. Purpose of the report

- 1.1. The Council as a Highways Authority has an obligation to keep highways free of snow and ice as far as reasonably practicable. This report seeks approval for our 2010/11 Winter Service Plan which details the Council's policies and operational procedures for dealing with snow and ice on the highway.

2. Introduction by Cabinet Member (if necessary)

- 2.1. Following the severe weather experienced last winter, Members were consulted about how we could improve our winter service arrangements. The severe weather last winter created a national grit shortage, leading to all Highways Authorities being instructed by Government to reduce gritting operations to conserve supplies. This had an impact in Haringey on carriageways and pavements that were not within the Priority 1 category.
- 2.2. This review of the Winter Service Plan is intended to take account of the feedback from consultation with Members, as well as the feedback received from residents and other sources during last winter, to provide the best possible response to future severe weather events. Within the revised plan priority has been given to

carrying out actions aimed at keeping transport and the emergency services moving, keeping businesses, schools and essential services open, and providing assistance for vulnerable people where it is needed.

3. State link(s) with Council Plan Priorities and actions and /or other Strategies:

3.1 Council Priorities

The Winter Service Plan links to all of the Council's priorities to some degree.

3.1.1 Priority 1 – Making Haringey one of London's greenest boroughs.

The Winter Service Plan sets out when, where, how and in what quantities salt grit will be used to treat ice and snow. Salt grit can be damaging to the environment and can cause harm to street trees and other plant and animal life. It can also affect bridges and accelerate corrosion of the steel when used in strong concentrations. Therefore it is important to use it only when necessary and only in the quantities required to deliver the required outcomes. The Winter Service Plan sets out the decision making process about when to grit as well as how and in what quantities grit will be laid to ensure it is only used when necessary and at recommended spread rates to avoid over-use.

3.1.2 Priority 2 – Creating a Better Haringey: cleaner, greener, safer.

The primary objective of the Winter Service Plan is to provide carriageways and footpaths that are free of ice and snow and so are safe to use, as far as reasonably practicable. It is not possible to guarantee that all carriageways and footpaths will be free of snow and ice and so resources will be deployed to benefit the most people by focussing on heavily used roads, as well as vulnerable people by focussing on roads where there are Residential Care Homes and schools.

3.1.3 Priority 3 – Encouraging a lifetime of well-being, at home, work, play and learning.

The Winter Service Plan has been designed to help residents and visitors to the borough do their usual activities through spells of cold weather when there is ice and snow to contend with.

3.1.4 Priority 4 – Promoting independent living while supporting adults and children when needed.

The Winter Service Plan has been designed to provide carriageway and pavement gritting at and leading to Residential Care Homes and schools at a level of priority that recognises how important they are, even though they are not necessarily heavily used by other road users.

3.1.5 Priority 5 – Delivering excellent, customer focussed, cost effective services

During severe weather it is not always possible to make every pavement and carriageway safe for pedestrians and drivers. However, it is important to ensure that the resources that are available are deployed to the best possible effect. The Winter Service Plan provides the details of how the Council will set out to achieve this so that, even those who find their own street has not been gritted, can get an

understanding of why this is and what the Council is doing for the borough as a whole that does benefit them, like making sure goods can be delivered to the shops they rely on, that public transport hubs are accessible and that bus routes are operational.

3.2 Use of Resources

3.2.1 The activities in the Winter Service Plan are delivered through the Integrated Waste Management and Transport Contract. To demonstrate value for money this contract was competitively tendered and awarded to Haringey Accord Ltd who have now been taken over by Haringey Enterprise Ltd. This contract is due to expire and a competitive dialogue process is currently under way for a new contract due to commence next April. The winter service is included as part of the package of functions in the new contract. The procurement process for the new contract will ensure that value for money is achieved for the delivery of winter service operations.

3.2.2 This contract is the most appropriate place for the winter service. It is almost always the case that at the on-set of severe weather requiring major gritting activities, street cleansing - and sometimes refuse and recycling collections - are suspended leaving a pool of skilled staff and fleet that cannot do their usual work. These resources can be deployed to gritting work. It is also appropriate because the winter service operation is based at Ashley Road Depot where the Council salt store is located. The combined effect of bringing together staff, fleet, depot and storage ensures the best use of resources is achieved to deliver the winter service.

4. Recommendations

- 4.1. That the revisions to the Winter Service Operational Plan 2010/11 be noted including the policies that determine when gritting will be undertaken and the prioritisation of locations for gritting activity (see paragraph 5.6).
- 4.2. That the proposed extension of the grit bin network to include 44 new sites at a cost of £15,000 be noted (see paragraph 5.8.1).
- 4.3 That the proposed minimum grit stock levels be noted (see paragraph 5.9.2).
- 4.4 That the proposal for an annual review of the Winter Service Operation Plan be noted.
- 4.5 That Overview and Scrutiny provides specific comments or recommendations to Cabinet concerning the revised Winter Service Operational Plan 2010/11.

5. Reason for recommendation(s)

- 5.1. Haringey Council's policy is to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice. The Council considers that the best way to achieve this is to prioritise certain locations and

surface types based on risk assessment. The detailed operational procedures and prioritised locations are provided in the Winter Service Operational Plan attached as Appendix 1 to this report.

5.2. Gritting Service

5.2.1 There are three types of gritting activity, these are as follows:

- Frost patrols, to deal with the formation of ice at low temperatures
- Pre-treatment, to provide gritting in advance of forecast snowfall
- Post-treatment, to provide gritting after snowfall and during continued snowfall

5.2.2 Also provided as part of the gritting service is a network of grit bins and a grit store at Ashley Road Depot.

5.3. Frost patrols

5.3.1 It will be the Council's policy to continue to carry out Frost Patrols when there is a forecast of near zero or sub-zero overnight temperatures, suggesting the risk of formation of frost and ice. Frost patrols are the most common form of gritting activity and happen on average 20 to 30 nights per winter season. They will provide for a programme of mechanical and manual gritting of a network of carriageways and pedestrian areas based on the following criteria:

- Carriageways with the steepest gradients;
- Carriageways with steeper gradients and/or that are more likely to ice over and for longer due to exposure and/or due to elevation; and
- Heavily used pedestrian areas with steepest gradients, bridges and steps in exposed locations that are most likely to ice over and for longer than other pedestrian areas.

5.3.2 The list of carriageways for treatment on frost patrols is detailed in Appendix B of the Winter Service Operational Plan. Muswell Hill is an example of a frost patrol carriageway. The list of pedestrian areas for treatment on frost patrols is detailed in Appendix M. The steps at Tottenham Hale Station is an example of a frost patrol pedestrian area.

5.4. Pre-treatment

5.4.1 It will be the Council's policy to carry out pre-treatment when there is a forecast of snow falling, combined with low temperatures giving rise to the risk of the snow settling to any depth likely to cause highway surfaces to become slippery.

5.4.2 Pre-treatment will provide for a programme of mechanical and manual gritting of a network of Priority 1 carriageways and Priority 1 pavements based on the following criteria:

- Carriageways with the steepest gradients, highest elevation/exposure and heaviest traffic, or any combination of these factors, including all bus routes

and any road serving hospitals, emergency service premises and special education needs schools; and

- Pavements in Town Centres and around Residential Care Homes, hospitals, emergency service premises and other essential services.

5.4.3 The list of Priority 1 carriageways for pre-treatment on the forecast of snow is detailed in Appendix B of the Winter Service Operational Plan. Wood Green High Road is an example of a Priority 1 carriageway. The list of Priority 1 pavements for pre-treatment on the forecast of snow is detailed in Appendix M. Green Lanes is an example of a Priority 1 pavement.

5.4.4 If a snow event occurs during school term time, carriageways leading to schools will be gritted directly after the gritting of the Priority 1 carriageway network has been completed.

5.5. Post treatment

5.5.1 It will be the Council's policy to carry out post-treatment activity to deal with fallen snow and compacted ice following and during a snow event where low temperatures are forecast that will prevent natural melting. Where necessary, post-treatment will be undertaken as repeat treatment for Priority 1 carriageways and pavements to keep them safe and operational throughout any snow event. Provided that the gritting of Priority 1 carriageways and pavements has been satisfactorily completed, further gritting will proceed on other carriageways and pavements and pedestrian areas based on the following criteria:

- Priority 2 Carriageways, those that carry significant levels of traffic and/or have less steep gradients, followed by Priority 3 Carriageways which are those remaining carriageways that have no significant gradient and carry light levels of traffic.
- Priority 2 pavements, those that serve schools (term-time only), followed by Priority 3 pavements, to support refuse and recycling collections, followed finally by Priority 4 pavements, any other pavement not already gritted.

5.5.2 The lists of Priority 2 and 3 carriageways to receive post treatment gritting activity are detailed in Appendix B of the Winter Service Operation Plan. The list of Priority 2 pavements to receive post treatment activity is detailed in Appendix M. There is no list for Priority 3 or 4 pavements. The work undertaken as part of these priorities would depend on the day of the week when the work is required with due consideration of what catch-up arrangements might be required for refuse and recycling collections delayed due to the weather.

5.5.3 It should be noted that during any given weather event it is unlikely that every carriageway and pavement priority will be completed. This is because weather events usually do not last so long that it is physically possible to carry out this level of work output and when they do last a long time it is often the case that higher priority work has to be repeated. It will be the Council's policy to ensure that work has been satisfactorily completed at each level of priority before

proceeding to the next.

5.5.4 Cycle paths that are within carriageways will be gritted at the priority level of the carriageway that they are within. Gritting of separate cycle lanes has not been set out as a priority in the Winter Service Operational Plan. The reasons for this are;

- cycle paths only form part of any cycle journey, there can be no guarantee that the non-cycle-path parts of any cycle journey will have been gritted, therefore gritting of cycle paths does not result in safe cycle journeys;
- gritting of cycle paths that are separate from carriageways requires manual gritting in the same way that pavements are gritted, which is inefficient and slow. Carrying out manual gritting of separate cycle paths would benefit less people and services than would benefit from the pavement gritting priorities as set out above; and
- cycling in good conditions carries some innate risk factors for cyclists, cycling in snow and ice conditions carries much higher risk factors for cyclists. The Council could be more exposed to the possibility of claims if gritting of cycle paths is prioritised in a way that would appear to encourage an activity that should not be encouraged in snow and ice conditions.

5.6 It is recommended that it will be the Council's policy to activate frost patrols, pre and post treatment gritting activity in accordance with the arrangements set out in paragraphs 5.3.1, 5.4.1 and 5.5.1 above.

5.7 It is recommended that the Council approves of the carriageway and pavement priorities for gritting activity as detailed in Appendices B and M of the Winter Service Operational Plan. The Winter Service Operational Plan is Appendix 1 of this report.

5.8 Grit Bins

5.8.1 There is currently a network of 103 grit bins in the borough. These have been placed mainly at locations where there are footpaths with gradients where gritting of footpaths can be undertaken to deal with ice or snow when appropriate. Following the extreme weather last winter the council received requests for 47 more grit bins. These are detailed in Appendix N of the Winter Service Operational Plan. The suggested sites have been inspected by officers and graded as to priority for installation based on risk factors such as gradient and proximity to junctions as follows – 27 high priority, 17 medium priority and 3 low priority. There is no case for installing grit bins at the low priority sites suggested as these locations were flat and with no specific risk factors. It is recommended that grit bins are installed at the 44 high and medium priority sites a cost of £15,000.

5.9 Grit Store

5.9.1 The grit store is located at Ashley Road Depot and can hold approximately 1,500 tonnes of grit. Haringey uses Cleveland Potash, one of only two major suppliers of grit in the UK, for its grit supplies. Last winter there was a national

shortage of grit and a National Salt Cell was established, meaning that the Government took control of all grit supplies. The usual expectation is that grit supplies are delivered within 4 weeks of any order being placed but this does not apply when a National Salt Cell has been established.

5.9.2 The rate of use of grit can be unpredictable but consideration should be given to what the minimum stock of grit should be at any point during the winter. Therefore it is recommended that the following minimum stock levels should be maintained throughout the winter and where stock falls below these minimum levels then in-season grit top up orders will be placed to bring the stock back up to at least the minimum levels;

- 1st November, minimum of 1,500 tonnes;
- 1st December, minimum of 1,200 tonnes;
- 1st January, minimum of 900 tonnes;
- 1st February, minimum of 900 tonnes; and
- 1st March, minimum of 900 tonnes.

5.9.3 These minimum grit stock levels are in keeping with nationally recognised minimums designed to ensure that there is some consistency across different local authorities and to ensure that there is a minimum level of resilience to respond to severe weather events.

6. Other options considered

6.1. [click here to type]

7. Summary

7.1. The winter of 2009/10 was the worst for 30 years. This placed all local authorities under severe pressure and tested winter service plans to the extreme. There have been some useful learning points from last winter's experience but care needs to be taken not to put in place unnecessary and possibly costly changes to the Winter Service Operational Plan that might not be required for an ordinary winter.

7.2. The Winter Service Operational Plan contains a number of changes that should help to improve the Council's response to severe weather conditions. These are as follows:

- Thirty two carriageways have been lifted out of Priority 2 or 3 into Priority 1, these changes were due to review of risk factors and also the presence of certain types of premises like the Mortuary and SEN schools. Five carriageways have been taken out of Priority 1 for opposite reasons.
- A new Priority 1B Carriageway category has been devised so that in term time schools on Priority 2 or 3 carriageways can be given accelerated treatment if it is warranted.

- Sixty one carriageways have been lifted out of Priority 3 into Priority 2 in recognition of the need to help support services gain access to Residential Care Homes from an earlier stage than would otherwise have been the case.
- Town Centre and Residential Care Home pavement gritting is now known as Priority 1 pavement gritting and has been extended to automatically include gritting outside transport hubs, hospitals and emergency service premises.
- A new Resilience Network has been devised in conjunction with Transport for London which ensures that in the event of another severe shortage of grit like last winter, there will be a recognised pan-London minimum gritted carriageway network that will keep London's main roads moving.
- Arrangements for gritting pavements for schools have been formalised into a new Priority 2 pavement gritting schedule that can be used in term time if required.
- There is a proposed extension of the grit bin network from 103 sites up to 147 sites.

7.3. Many of these changes have arisen as a result of feedback and suggestions from various sources which are explained in Section 12 of this report.

7.4. It is important to understand that the Winter Service Operational Plan is only designed to deal with gritting of public highways. Homes for Haringey, the Parks Service, CYPS, ACCS and Corporate Property Services all have responsibility for winter service and gritting arrangements within the external areas and premises they are responsible for. The same applies to HSP partners and Registered Social Landlords in regard to their own property. Guidance and support is available from the Environmental Resources Team to help with these arrangements if required.

7.5. The Winter Service Plan does not address the issue of pot-holes that may arise after severe weather.

8. Chief Financial Officer Comments

8.1. The costs of the Winter Service Plan are included within the existing contract with Haringey Enterprise and are largely fixed and budgeted for within Environmental Resources. In the event of a particularly severe winter additional costs may be incurred largely due to the cost of purchasing additional salt supplies.

8.2. Winter Service functions will continue to be provided by an external contractor in the future and procurement for the new contract is at an advanced stage.

8.3. There is a one-off cost of £15,000 related to the recommendation to install additional grit bins. It is assumed these costs will be contained within existing funding for 2010-11. In future years all costs of winter maintenance will be

contained within the cost envelope for the new contract.

9. Head of Legal Services Comments

9.1 Corporate Legal Services have no comments to make on this report.

10. Head of Procurement Comments –[Required for Procurement Committee]

10.1. [click here to type]

11. Equalities & Community Cohesion Comments

- 11.1. The Winter Service Operational Plan recognises that vulnerable people are placed at potentially greater increased risk than other people at times of severe weather. For this reason Residential Care Homes and schools have been given special consideration in the establishment of pavement and carriageway gritting priorities.
- 11.2. It is not possible to produce a Winter Service Operational Plan that addresses the needs of every vulnerable person in a pre-determined way. The Council will always endeavour to respond to an urgent call for gritting in isolated locations to help vulnerable people, but in doing so we must also focus on delivering the priorities set out in the plan. Similarly, we will respond to calls for urgent gritting where they are received from the emergency services.
- 11.3. Severe weather can sometimes promote a community spirit with neighbours helping each other in adversity. The Council will encourage this through the advice and guidance given out on the web-site.

12. Consultation

- 12.1. On the 1st February 2010, the then Cabinet Member for Environment and Conservation, Cllr. Bevan, wrote to all Councillors asking to hear about experiences from the last two winters to contribute to a review of the winter service. The responses that were received from Councillors, along with the feedback and suggestions received from a wide range of other sources have been captured and summarised in Appendix 2 of this report, Summary of Consultation and Feedback.
- 12.2. Included in the Summary of Consultation and feedback are the details of who and where feedback was received from, what the feedback was and how the Environmental Resource Service has responded to the feedback. The feedback is quite varied in nature ranging from simple grit bin location suggestions to more analytical questions about why some pavements or carriageways are higher or

lower priority than others. In most cases it has been possible to respond positively to the feedback and reflect this in the changes that have been made to the Winter Service Operational Plan, as summarised in Section 7 above.

12.3. The Environmental Resource Service was required to work very closely with the Emergency Planning Team, CYPS, ACCS and other Council services during the worst of the weather last winter. This helped all of the respective services to get a good understanding of the challenges and demands faced by each other. A good deal of what was learnt during this time has been used to make changes to the Winter Service Operational Plan. It has also helped to clarify lines of responsibility so that each service is aware of and can prepare to meet its own responsibilities for treatment of ice and snow.

12.4. Further consultation is planned with Emergency Services, neighbouring London Boroughs, TfL and other key partners prior to Cabinet on 14th October 2010. Appendix 2 will be updated with any feedback from this consultation.

12.5. The Winter Service Operational Plan should be regarded as a dynamic document and subject to annual review to ensure that it continues to reflect the needs of people in Haringey and changes in the nature of the borough. It is planned that Haringey People and Area Assemblies be used to promote awareness Winter Service Operational Plan giving residents the opportunity to comment on it, thereby helping to inform next year's review. It is recommended that the Winter Service Operational Plan be reviewed annually.

13. Service Financial Comments

13.1. The cost of providing the winter service within the current contract is fixed so that for an average winter the Council would not expect to pay any significant additional cost to or make any significant deduction from the contractor. As such there is a reasonable level of cost certainty. The changes to the winter service explained in this report and set out in the Winter Service Operational Plan have been explained to Haringey Enterprise Ltd, the service provider. Enterprise has stated that there will be no additional cost for the provision of the revised winter service operation for the coming winter.

13.2. Looking further ahead, a draft of the revised Winter Service Operational Plan has been provided in confidence to the two bidders taking part in competitive dialogue process for the new waste management contract due to commence in April 2011. Both bidders are aware that there is an overall cost envelope for the new contract and that the winter service is required to be provided within this cost envelope. Therefore, the provision of the revised winter service will not lead to additional costs in the new waste management contract.

13.3. There is a one-off additional cost of around £15,000 associated with the installation of the 44 new grit bins recommended for installation as detailed in

Section 5 of this report. This additional cost can be managed within the budget of the Environmental Resource Service.

14. Service Comments, Advice to Residents

14.1. The Council does not expect or encourage residents or businesses to clear snow or ice from the pavements or footpaths that are part of the highway outside where they live or work. This is because:

- they could injure themselves doing this work
- they may not be fit enough to do such work
- they may not have the correct tools or protective equipment to do this work or know how to use them properly and safely
- they could injure other people or create conditions that cause injury to others
- they could damage property

14.2 The Council will provide advice and guidance to residents through the web-site about how to prepare for and cope with severe snow and ice weather conditions.

15. Comments from the Emergency Planning and Business Continuity Manager

15.1 The plan reflects the lessons from the last winter. In particular, the need to keep essential services running and schools open through severe weather has been thoroughly incorporated. The plan also aligns properly with London-wide arrangements for dealing with severe weather emergencies. In preparing the plan, officers have been mindful of limitations in the national supply arrangements for gritting salt which means there is an unavoidable risk that demand exceeds supply. The plan takes precautions to manage this risk effectively by strengthening the management of the Council's salt supply.

16. Use of appendices /Tables and photographs

Appendix 1 – Winter Service Operational Plan
Appendix 2 – Feedback and Consultation Table

17. Local Government (Access to Information) Act 1985

Highways Act, 1980

Well Maintained Highways - Code of Practice for Highway Maintenance Management

Highway Winter Maintenance Guide

Pollution Prevention Guidelines Highway Depots: PPG10

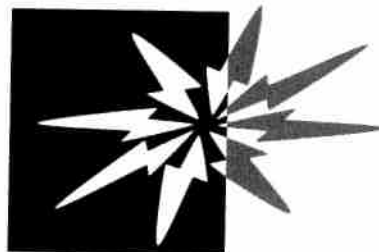
Winter Service Review Report, Appendix 1

LONDON BOROUGH OF HARINGEY

WINTER SERVICE

OPERATIONAL PLAN
2010 – 2011
DRAFT v6i

FRONTLINE SERVICES **Urban Environment Directorate**



Haringey Council

LONDON BOROUGH OF HARINGEY

FRONTLINE SERVICES Urban Environment Directorate

WINTER SERVICE OPERATIONAL PLAN FOR THE WINTER OF 2010/11

CONTENTS

EXECUTIVE SUMMARY	5
INTRODUCTION	8
A STATEMENT OF POLICIES AND RESPONSIBILITIES	10
A1 POLICIES AND OBJECTIVES	10
A2 CLIENT AND SERVICE PROVIDER RISKS AND RESPONSIBILITIES	16
A3 PARTNERSHIP OR SHARED RISKS AND RESPONSIBILITIES	17
A4 DECISION MAKING PROCESS AND RESPONSIBILITIES	17
A5 LIAISON AND COMMUNICATION ARRANGEMENTS WITH OTHER AUTHORITIES AND OTHER PUBLIC SERVICES	18
A6 WINTER RISK PERIOD.....	19
A7 RESILIENCE STANDARD.....	19
A8 LEGISLATIVE BACKGROUND.....	21
B ROUTE PLANNING FOR CARRIAGEWAYS, FOOTWAYS AND CYCLE ROUTES	23
B1 CARRIAGEWAY ROUTES BY RISK LEVEL;.....	25
CARRIAGEWAY ROUTES FOR PRE– TREATMENT.....	ERROR! BOOKMARK NOT DEFINED.
ANNUAL REVIEW OF CARRIAGEWAY PRIORITIES	28
CARRIAGEWAY ROUTES FOR POST–TREATMENT BY RISK LEVEL	28
CARRIAGEWAY ROUTES FOR SNOW CLEARING BY RISK LEVEL.....	28
B2 RESPONSE AND TREATMENT TIMES FOR ALL CARRIAGEWAY TREATMENTS.....	30
B3 ROUTES FOR FOOTBRIDGES, SUBWAYS AND OTHER HIGH RISK PEDESTRIAN AREAS	31
B4 RESPONSE AND TREATMENT TIMES FOR FOOTWAY AND CYCLE ROUTE TREATMENTS...	31
B5 ROUTES FOR OTHER FOOTWAY AND CYCLE ROUTE TREATMENT BY RISK LEVEL;.....	32
B6 ALLOCATION OF PLANT, VEHICLES, EQUIPMENT AND MATERIALS TO ROUTES.....	33
B7 LOCATION AND MAINTENANCE OF GRIT BINS AND GRIT HEAPS;	33
ANNUAL REVIEW OF FOOTPATH PRIORITIES	34
B8 SPECIAL SITES OR FEATURES (E.G. NEAR RAILWAYS OR TRAFFIC CALMING).....	34
C WEATHER PREDICTION AND INFORMATION	34
C1 THE DECISION MAKING PROCESS	34
C2 ROAD WEATHER INFORMATION BUREAU SERVICE.....	34
C3 ROAD WEATHER STATIONS	34
C4 TIMING AND CIRCULATION OF INFORMATION	35
C5 ROAD WEATHER FORECAST.....	35
C6 REPORTING PROCEDURE	35
C7 THERMAL MAPPING.....	35
C8 MAINTENANCE OF ICE DETECTION EQUIPMENT.....	35

C9	INFORMATION TO BE PROVIDED.....	35
D	ORGANISATIONAL ARRANGEMENTS AND PERSONNEL.....	35
D1	COMMAND, CONTROL AND OPERATIONAL ORGANISATION.....	37
D2	ARRANGEMENTS WITH OTHER AUTHORITIES;.....	38
D3	ARRANGEMENTS WITH OTHER PUBLIC SERVICES;	38
D4	DECISION MAKING;	39
D5	OPERATIONAL RECORD KEEPING AND REPORTING	39
D6	PLANT AND VEHICLE STAFFING ARRANGEMENTS, INCLUDING MANAGEMENT OF DRIVERS' HOURS REGULATIONS	40
D7	MATERIALS MANAGEMENT	40
D8	TRAINING AND DEVELOPMENT ARRANGEMENTS;	40
D9	SCHEDULES OF CONTRACT AND VOLUNTARY PERSONNEL (CVP).....	42
D10	EMPLOYEE ROLES AND RESPONSIBILITIES	42
D11	CONTACT AND COMMISSIONING ARRANGEMENTS FOR CVP	43
D12	EMPLOYEE DUTY SCHEDULES, ROTAS AND STANDBY ARRANGEMENTS	43
D13	WINTER SERVICE EXERCISING ARRANGEMENTS;	43
D14	STANDARD OPERATING PROCEDURES	43
D15	ESCALATION AND EMERGENCY OPERATING PROCEDURES	43
D16	OPERATIONAL MONITORING.....	44
D17	HEALTH AND SAFETY PROCEDURES.....	44
D18	CONTINGENCY ARRANGEMENTS.....	45
E	FACILITIES, PLANT, VEHICLES AND EQUIPMENT.....	46
E1	WINTER SERVICE COMPOUNDS AND FACILITIES	47
E2	CALIBRATION PROCEDURES	47
E3	FLEET INVENTORY INCLUDING LICENCE REQUIREMENTS AND CAPACITY.....	47
E4	FUEL STOCKS AND LOCATIONS.....	47
E5	LOCATION OF PLANT, VEHICLES, SNOW-BLOWERS AND OTHER EQUIPMENT	48
E6	CONTINGENCY ARRANGEMENTS.....	48
E7	GARAGING, SERVICING AND MAINTENANCE ARRANGEMENTS	48
E8	CONTACT AND HIRE ARRANGEMENTS FOR CONTRACT PLANT.	49
F	SALT AND OTHER DE-ICING MATERIALS.....	49
F1	LOCATION AND CAPACITY OF STOCKS FOR SALT AND OTHER MATERIALS	51
F2	CONTACTS AND PURCHASING ARRANGEMENTS FOR SUPPLIES	52
F3	MINIMUM PRE-SEASON AND IN-SEASON STOCK LEVELS	52
F4	IN SEASON RE-STOCKING ARRANGEMENTS.....	52
F5	TESTING ARRANGEMENTS	53
F6	STOCK LEVEL MONITORING AND FORECASTING PROCEDURES	53
F7	LOADING ARRANGEMENTS.....	53
F8	TREATMENT REQUIREMENTS INCLUDING SPREAD RATES.	54
G	OPERATIONAL COMMUNICATIONS.....	55
G1	TECHNICAL SYSTEMS INFORMATION	55
G2	REPORTING ARRANGEMENTS AND PROTOCOLS;	55
G3	INVENTORY AND ALLOCATION, INCLUDING BACK UP.	56
H	CONTINGENCY PLAN	56
H1	CONTINGENCY ARRANGEMENTS FOR WINTER SERVICE DELIVERY SUCH AS SALT SUPPLY, DRIVERS, FUEL VEHICLES ETC;.....	56

H2	ARRANGEMENTS FOR IMPLEMENTING MINIMUM WINTER NETWORKS;.....	57
H3	MUTUAL AID E.G. RESOURCES AVAILABLE FROM ADJACENT AUTHORITIES;	57
H4	LIAISON WITH CATEGORY 1 AND CATEGORY 2 RESPONDERS (REFERENCE CIVIL CONTINGENCIES ACT 2004).	58
I	INFORMATION AND PUBLICITY	59
I1	LOCAL PRESS AND BROADCAST CONTACT INFORMATION.....	61
I2	PUBLIC INFORMATION LEAFLETS	61
I3	OTHER KEY LOCAL AND NATIONAL CONTACT INFORMATION	61
I4	THERMAL MAPPING.....	62
I5	RESPONSIBILITIES AND GUIDANCE FOR PROVIDING INFORMATION;.....	62
I6	THE DECISION MAKING PROCESS	62
I7	ROAD WEATHER STATIONS.....	62
I8	INFORMATION TO BE PROVIDED.....	63
I9	ROAD WEATHER INFORMATION BUREAU SERVICE.....	63
I10	TIMING AND CIRCULATION OF INFORMATION;	63
I11	ROAD WEATHER FORECAST.....	63
I12	NOTIFICATION ARRANGEMENTS FOR FAILURE TO MAINTAIN THE PUBLISHED NETWORK.....	63
I13	REPORTING PROCEDURE	63
I14	MAINTENANCE OF ICE DETECTION EQUIPMENT.....	64
J	QUALITY MANAGEMENT	64
J1	QUALITY MANAGEMENT REGIME;	64
J2	DOCUMENT CONTROL PROCEDURES.....	64
J3	DISTRIBUTION OF DOCUMENTS.....	65
J4	INFORMATION RECORDING AND ANALYSIS;	65
J5	ARRANGEMENTS FOR PERFORMANCE MONITORING, AUDIT AND UPDATING;	66
J6	PROCEDURE FOR DEVIATION FROM THE WINTER SERVICE PLAN.....	66
	APPENDIX A – DECISION MAKING PROCESS REVIEW ALL APPENDICES	68
	APPENDIX B – WINTER SALTING ROUTES – ALL PRIORITIES	73
	APPENDIX E – WINTER SERVICE – DAILY LOG SHEET	109
	APPENDIX F – WINTER SERVICE – DAILY DECISION JUSTIFICATION LOG ..	111
	APPENDIX G - WINTER SERVICE RECORD	112
	APPENDIX H – WINTER SERVICE RECORD ADDITIONAL SHEET	113
	APPENDIX J – DUTY ROTA AND ADDRESS AND TELEPHONE NUMBERS: ...	115
	APPENDIX K – RESILIENCE NETWORK	116
	APPENDIX M – FOOTWAY PRIORITY ROUTES.....	120
	APPENDIX N – SALT BIN LOCATIONS.....	144
	APPENDIX P – NETWORK RAIL GUIDANCE FOR LEVEL CROSSINGS.	155

EXECUTIVE SUMMARY

1) Introduction

The Winter Service is the obligation placed on local authorities to keep their streets and roads free from ice and snow, so far as is reasonably practical.

The Haringey Winter Service Operational Plan is the document that clarifies the winter gritting policy and the operational service plan to demonstrate how Haringey intends to meet its obligation during the winter of 2010/11.

Responsibility for the provision of the Winter Service Operational Plan resides within the Directorate of Urban Environment, Frontline Services Business Unit, Environmental Resources Team based at River Park House. The mainstay of the actual Winter Service operation is based at Ashley Road Depot, Tottenham, N17.

In July 2005 a revised Code of Practice for Highways Maintenance was published by the Roads Liaison Board. This document outlined best practice nationally and recommended actions to be taken for Winter Service, these recommendations are contained within Section 13 of the Code of Practice. Due to the severe winter in 2008/2009 this Section of the Code of Practice together with Appendix H of the same Code were totally revised and published in December 2009. Therefore this Winter Service Operational Plan takes into account the new guidance and has been laid out in accordance with the recommendations of Appendix H of the Code. There may be further guidance issued as a result of the even more severe winter weather in 2009/2010 but this plan has been written prior to such guidance being issued.

2) Synopsis

Haringey's Winter Service Policy and Plan includes the recommendations of the Code of Practice, the first being;

“Authorities should formally approve, adopt, and publish, in consultation with users and key stakeholders, a Winter Service Operational Plan, based on the principles of this Code.”

Another recommendation of the Code is to review the policy and plan annually, this is to ensure that the policy and plan are current and to consider new technologies and methods.

It is also accepted that the Policy and Plan, if followed, is consideration should Haringey be taken to court by a third party for loss or damage, to individuals as well as property.

3) Methodology

The Haringey Winter Service Operational Plan details how Haringey will carry out its Winter Service. It is a lengthy and technical document that, once adopted for the approaching winter, will be published on the Council's web-site. The published version will, however, have confidential contact names and numbers removed.

The method in determining which parts of the Haringey Street network which need treating is a prioritised, risk-based approach. The Haringey Street Network is a complex mix of carriageway and footway hierarchy.

The carriageway network has been broken down from the most heavily used and dangerous in terms of gradient, to the least used and those without any gradient. The breakdown of the carriageway network also takes into account the presence of;

- essential and emergency services such as fire stations, ambulance stations, hospitals and bus stations; and
- facilities used by vulnerable people, such as Residential Care Homes and schools;

to give those carriageways enhanced levels of priority during snow events.

The footway network has been broken down into using similar principles to those applied to carriageways.

The method used is risk-based. This is where all streets are assessed and prioritised based on the risk if the street is not treated. It is not possible to treat every street in the borough, this is summarised in the policy statement below.

Haringey receives its weather forecast information from its contractor. For the winter of 2010/11 the contractor is Haringey Enterprise Ltd. The parent company for Haringey Enterprise Ltd is Enterprise PLC. The company website is:

<http://www.enterprise.plc.uk/>

The contractor is required to purchase bespoke weather forecast information from a reputable forecaster. The forecaster currently being used for this is Meteogroup UK. The company website is:

<http://www.meteogroup.co.uk/>

When the weather forecast information indicates low temperatures, frost, ice or snow, action will be taken to implement the Winter Service Operational Plan. Sometimes these weather conditions, or the severity / timing of them, are not forecast and when this happens action will also be taken to implement the Winter Service Operational Plan.

4) Types of Winter Service activity, surface types, application methods

Although the Winter Service activity is commonly referred to as "gritting", strictly speaking the normal material used is not grit, it is rock salt for de-icing. However, for ease of reference the terms 'grit' and 'gritting' are used in this plan. The use of grit can have environmental consequences. It can adversely affect vegetation, pollute watercourses and leave a residue on footways. It can also damage the road structure, bridges and structures, utility apparatus and vehicles. Used responsibly it can have minimal environmental impact. In the interests of

sustainability it is important to ensure that only the minimum amount of grit is used to deal with the prevailing conditions.

There are three distinct types of gritting activity. These are:

- Frost patrols, to deal with the risk of frost/ice formation on dry surfaces resulting from overnight low temperatures;
- Pre-treatment, where snow is forecast or where road surfaces are wet and sub-zero temperatures are forecast before drying out will naturally happen; and
- Post treatment, where snow has fallen and/or continues to fall.

There are three types of surface for the application of grit and two methods for applying the grit. The types of surface and the application methods are:

- carriageways, almost all carriageways are treated by mechanical means using dedicated gritting vehicles and/or vehicles with demountable gritting bodies, this is an efficient and rapid application method;
- footpaths, almost all footpaths are treated by manual application of grit by teams using shovels supported by a caged street cleansing vehicle for carrying grit, this is a less efficient and slow application method. Grit bins can support footpath gritting; and
- cycle paths, where these are within carriageways they can be gritted by mechanical means as part of the carriageway gritting programme, where these are separate from the carriageway they can only be gritted by manual means. Grit bins can support separate cycle path gritting.

5) Policy Statement

Haringey Council's policy is to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice. The Council considers that the best way to achieve this is to prioritise certain locations and surface types based on risk and level of use. The detailed operational procedures are covered by the Winter Service Operational Plan which is to be reviewed and published each year.

The policy for invoking gritting activity in Haringey is based on the three types of gritting activity as follows.

Frost patrols

Frost patrols will be carried out when there is a forecast of near zero or sub-zero overnight temperatures, suggesting the risk of formation of frost and ice. Frost patrols are the most common form of gritting activity and happen on average 20 to 30 nights per winter season.

Pre-treatment

Pre-treatment is designed to mitigate against the possibility of snowfall settling. Pre-treatment will be carried out when there is a forecast of snow falling, combined with low temperatures giving rise to the risk of the snow settling.

Post-treatment

Post-treatment activity is designed to disperse settled snow and compacted ice following and during a snow event where low temperatures are forecast that will prevent natural melting.

Non-priority and Ad-hoc gritting requests

Where unexpected requests for carriageway or footpath gritting are received to support emergency responses by the “Blue Light” emergency services, these will be carried out at the earliest available opportunity. Where requests are received from other sources, consideration will be given to responding to these with due regard to the Council’s overarching priority hierarchy.

Grit bins

There is currently a network of 103 grit bins in the borough. These have been placed mainly at locations where there are footpaths with gradients where gritting of footpaths can be undertaken to deal with ice or snow when appropriate. The Council is considering the installation of more grit bins at up to 47 new locations.

Grit supply

The Council’s grit supply is located at Ashley Road Depot. The store holds approximately 1,500 tonnes of grit. It is the policy of the Council to enter each month in the core winter season with grit stocks of at least the following levels:

- 1st November, minimum of 1,500 tonnes;
- 1st December, minimum of 1,200 tonnes;
- 1st January, minimum of 900 tonnes;
- 1st February, minimum of 900 tonnes; and
- 1st March, minimum of 900 tonnes.

More detailed information about the Council’s priorities and policies in regard to frost patrols, pre-treatment, post treatment, non-priority gritting, grit bins and grit stocks is provided in Section A1 below.

INTRODUCTION

The format of this Plan is taken directly from the revised version of Chapter 13 of the ‘Well Maintained Highways Code of Practice for Highway Maintenance Management’, published in December 2009. For ease of reference in this Plan the Code of Practice will be referred to as ‘the Code’. Throughout this Plan parts of the Code will be summarised in shaded box format without further acknowledgment to avoid unnecessary repetition.

Although sometimes termed ‘Winter Maintenance’, the particular network management requirements during winter are not maintenance, in the traditional sense, but specialist operational services. The term ‘Winter Service’ has been adopted by the Code.

Winter Service deals with regular, frequent and reasonably predictable occurrences like low temperatures, ice and snow, as well as with exceptional events. Whilst the effects of climate change are likely to result in an increased

frequency and intensity of severe winter events, these can be taken into account in Winter Service planning. Therefore Winter Service can and should be subject to the same regime of plan, deliver, review and improve as other aspects of the highway maintenance regime.

Policies and plans developed for Winter Service are likely to have relevance in emergency planning for dealing with extreme weather conditions including flooding, high winds and high temperature, as discussed in Section 14 of the Code. The incidences of such events may be affected by climate change. They are also likely to have some relevance to the wide range of non-weather related emergencies that could affect the highway network.

Although a very specialised area, Winter Service is a significant aspect of network management both financially and in terms of its perceived importance to users. It can also have significant environmental effects. The organisation of the service is likely to have considerable implications for the overall procurement and management of other highway maintenance services. This Section of the Code should therefore be read in conjunction with other sections dealing with these issues and Appendix H of the Code.

Objectives

Winter Service can contribute significantly to each of the core objectives set out in the Code as described below:

Customer

There are, in all parts of the UK, very considerable user needs and expectations and these can be a major influence on customer satisfaction through demonstrating an efficient, effective and proportionate response to winter conditions.

Safety

Safety is a prime consideration for Winter Service, even though statutory obligations and user needs vary in different parts of the UK.

Serviceability

Maintaining availability and reliability of the highway network is a key objective for Winter Service and one where user judgements of performance will be immediate rather than longer term.

Sustainability

Low temperatures and the formation of ice can cause serious damage to the fabric of running surfaces and accelerated damage of the network. Effective Winter Service can contribute to a reduction in whole life costs and minimise damage to the environment.

The plan has been revised in the light of the new guidance and is set out in the exact format with the same headings as detailed in the revised Appendix H of the Code of Practice.

This plan does not address the issue of pot-holes that arise after severe weather.

A STATEMENT OF POLICIES AND RESPONSIBILITIES

A1 Policies and objectives

Authorities should formally approve and adopt policies and priorities for Winter Service, which are coherent with wider objectives for transport, integration, accessibility and network management, including strategies for public transport, walking and cycling. They should also take into account the wider strategic objectives of the authority.

Issues for consideration in developing policy should include:

- treatment of facilities for public transport users;
- treatment of facilities for road users;
- treatment of facilities for walking and cycling;
- treatment of transport interchanges;
- treatment of promoted facilities;
- extent of priority for emergency services;
- extent of priority for key public services and critical infrastructure;
- extent of priority for vulnerable users;
- other local circumstances.

Authorities should develop service standards for Winter Service which define the Overall Winter Period, the Core Winter Period, the desired level of resilience and treatment routes.

These policies and service standards should be developed as far as reasonably possible with users and key stakeholders and should also be based on a risk assessment to define the scope of the service

Authorities should formally approve, adopt, and publish, in consultation with users and key stakeholders, a Winter Service Plan based on the principles of this Code.

The Winter Service Plan should be reviewed annually in consultation with a wide range of stakeholders.

Suggested contents of the Winter Service Plan are detailed in Appendix H (of Code of Practice). The Plan should recognise the fundamental differences between the main components of Winter Service for carriageways, cycle routes, footways and any critical areas and infrastructure as follows:

- pre-treatment - "precautionary" salting;
- post-treatment - continuing salting following the formation of ice;
- clearance of ice and snow;
- dealing with continuous severe conditions.

The Council will formally approve and adopt the policies and the priorities as listed in this plan. Therefore the Council policy is as follows.

SUMMARY

Haringey Council's policy is to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice. The Council considers that the best way to achieve this is to prioritise certain locations and surface types based on risk assessment. The detailed operational procedures are covered by the Winter Service Operational Plan which is to be reviewed and published each year.

The policy for invoking gritting activity in Haringey is based on the three types of gritting activity as follows.

Frost patrols

Frost patrols will be carried out when there is a forecast of near zero or sub-zero overnight temperatures, suggesting the risk of formation of frost and ice. Frost patrols are the most common form of gritting activity and happen on average 20 to 30 nights per winter season. Frost patrols will provide for a programme of mechanical and manual gritting of a network carriageways and pedestrian areas based on the following criteria:

- carriageways with the steepest gradients likely to cause vehicles to slide and not stop even when brakes are applied;
- carriageways, with steeper gradients that are more likely to ice over and for longer due to exposure and/or due to elevation; and
- heavily used pedestrian areas with steepest gradients, bridges and steps in exposed locations that are most likely to ice over and for longer than other pedestrian areas.

Cycle paths within carriageways that are gritted as part of a frost patrol will benefit from this activity. However, there will be no gritting of cycle paths within carriageways that are not gritted as part of the frost patrol and no gritting of cycle paths that are separate from carriageways.

The list of carriageways for treatment on frost patrols is detailed in Appendix B, the Frost Patrol carriageway gritting list. The list of pedestrian areas for treatment on frost patrols is detailed in Appendix M, the Frost Patrol pavement gritting list.

Pre-treatment

Pre-treatment is designed to guard against the possibility of snowfall settling. Pre-treatment will be carried out when there is a forecast of snow falling, combined with low temperatures giving rise to the risk of the snow settling. Pre-treatment will provide for a programme of mechanical and manual gritting of a network of carriageways and pedestrian areas based on the following criteria:

- carriageways with the steepest gradients likely to cause vehicles to slide and not stop even when brakes are applied;
- carriageways carrying the heaviest vehicular traffic;
- carriageways serving Special Educational Needs schools;

- heavily used footpaths and pedestrian areas serving locations where emergency and essential services are present, for example Town Centres, hospitals, Residential Care Homes and transport hubs; and
- pedestrian areas at bus stops, kerbs and crossings.

It will be the aim to pre-treat carriageways defined in the Priority 1 Carriageway gritting list and all footpaths defined in the Priority 1 and 1B Pavement gritting lists before snow begins to fall.

The list of carriageways for Priority 1, pre-treatment gritting activity is detailed in Appendix B.

The list of pavements for Priority 1 and Priority 1B, pre-treatment gritting activity is detailed in Appendix M.

Cycle paths within carriageways that are gritted as part of pre-treatment gritting activity will benefit from this activity. However, there will be no gritting of cycle paths within carriageways that are not gritted as part of the pre-treatment activity and no pre-treatment of cycle paths that are separate from carriageways.

Post-treatment

Post-treatment activity is designed to disperse settled snow and compacted ice following and during a snow event where low temperatures are forecast that will prevent natural melting. Post-treatment will provide for a programme of mechanical and manual gritting of a network carriageways and pedestrian areas based on the following criteria:

- carriageways serving schools;
- carriageways with less steep gradients likely to cause vehicles to slide and not stop even when brakes are applied, including also carriageways serving Residential Care Homes;
- carriageways that are flat and carry only light vehicular traffic and to support refuse and recycling collections;
- footpaths serving schools; and
- footpaths to support refuse and recycling collections.

The importance of keeping schools open during severe weather was highlighted during the winter of 2009/10. To reflect this as a priority in this plan there are special arrangements for gritting for schools when snow falls during school term time. A special carriageway gritting list, called Priority 1A (Schools) carriageway gritting list, has been devised detailing any carriageway where a school is located that is not on the Priority 1 carriageway gritting list. The Priority 1A (Schools) gritting list will be invoked for a snow event during term time making these carriageways the first to be gritted after all Priority 1 carriageways have been treated. A pavement gritting list, called Priority 2 pavement gritting list, has been devised for the same reason and will be invoked in the same circumstances after Priority 1 pavement gritting has been completed.

Depending on the on-going weather and forecast situation, and provided that Priority 1 and 1A carriageway gritting has delivered safe carriageway conditions

on all of those carriageways, gritting of carriageways will proceed as detailed in the Priority 2 carriageway gritting list.

Depending on the on-going weather and forecast situation, and provided that Priority 1, 1A and 2 carriageway gritting has delivered safe carriageway conditions on all of those carriageways, gritting of carriageways as detailed in the Priority 3 carriageway gritting list will be considered. Generally Priority 3 carriageway gritting will be undertaken in an order to support refuse and recycling collections and subject to all higher priority carriageway gritting holding good.

Depending on the on-going weather and forecast situation, and provided that Priority 1, 1B and 2 pavement gritting has delivered safe pavement conditions on all of those pavements, gritting of pavements will proceed in an order to support refuse and recycling collections and subject to all higher priority pavement gritting holding good.

There are no designated target times for completion of post treatment gritting activities. This is because there are too many variables at play in this situation that do not allow meaningful targets to be formalised. Nevertheless, assessment of performance will be carried out through measurement of work completed, monitoring, observations and feedback.

The lists of carriageways for Priority 1A, 2 and 3 post-treatment gritting activity are detailed in Appendix B.

The list of pavements for Priority 2 post-treatment gritting activity is detailed in Appendix M. There are no formal lists for pavement gritting beyond Priority 2 as this activity will be driven by whatever day of the week when snowfall occurs and the locations where refuse and recycling collections are taking place, whether these be on scheduled collection days or delayed due to the weather.

Cycle paths within carriageways that are gritted as part of post-treatment gritting activity will benefit from this activity. However, there will be no gritting of cycle paths within carriageways that are not gritted as part of the post-treatment activity. Gritting of cycle paths has not been prioritised within this plan for a number reasons. These are:

- cycle paths only form part of any cycle journey, there can be no guarantee that the non-cycle-path parts of any cycle journey will have been gritted, therefore gritting of cycle paths does not result in safe cycle journeys;
- gritting of cycle paths that are separate from carriageways requires manual gritting in the same way that pavements are gritted, which is inefficient and slow. Carrying out manual gritting of separate cycle paths would benefit less people and services than would benefit from the pavement gritting priorities as set out above; and
- cycling in good conditions carries some innate risk factors for cyclists, cycling in snow and ice conditions carries much higher risk factors for cyclists. The Council could be more exposed to the possibility of claims if gritting of cycle paths is prioritised in a way that would appear to encourage an activity that should not be encouraged in snow and ice conditions.

Post-treatment cannot provide for complete gritting of every carriageway, pavement and cycle path in the borough as it is not reasonably practicable to achieve this.

The following tables summarise the gritting priorities and the times when action will be taken.

Carriageway Route/Priority	Treated on forecast of frost?	Treated on forecast of snow?	Treated during or after snow?
Frost Patrol	Yes	No	No
1	No	Yes	Yes
1A	No	Yes (if time permits)	Yes
2	No	No	Yes (if P1/P1A are complete)
3	No	No	Yes (if P1/P1A/2 are complete)

Footpath Route/Priority	Treated on forecast of frost?	Treated on forecast of snow?	Treated during or after snow?
Frost patrol	Yes	No	No
1	No	Yes	Yes
1B	No	Yes (if time permits)	Yes
2	No	No	Yes (if P1/ P1B are complete)
3	No	No	Yes (but in parts and only if P1/P1B/P2 are complete)
4	No	No	Yes (but unlikely and only if P1/P1B/P2/P3 are complete)

Non-priority and Ad-hoc gritting requests

Responding to ad-hoc gritting requests and complaints about lack of gritting of non-prioritised or low priority areas can have a detrimental affect on the Council's overall response to weather events if not carefully managed. Where unexpected requests for carriageway or footpath gritting are received to support responses by the emergency services, these will be carried out at the earliest available opportunity. Where requests are received from other sources, consideration will be given to responding to these with due regard to the Council's overarching policy criteria which have been set out above. If a non-priority gritting request is refused or given a delayed response time, the person or organisation making the request will receive an explanation of the reason for refusal or delay. These

requests will be logged for review at the end of the winter season as they might be resolved by other means in future, for example by providing new grit bins.

Grit bins

There is currently a network of 103 grit bins in the borough. These have been placed mainly at locations where there are footpaths with gradients where gritting of footpaths can be undertaken to deal with ice or snow when appropriate. The Council is considering the installation of more grit bins at 47 locations.

Grit bins are a useful immediate resource in times of need. They help to increase the storage capacity for grit as there is a limit to what can be stored at the depot. Whilst grit bins serve a useful purpose they can only contribute to a limited degree to the overall response to a snow or ice event. They can be subject to theft or abuse and as such cannot be relied upon to deliver Winter Service requirements in isolation from other gritting activities.

A list of the locations of grit bins in Haringey is detailed in Appendix N. Also detailed in Appendix N is the list of 47 sites where consideration is being given to the installation of more grit bins ready for the winter of 2010/11.

Grit supply

The Council's grit supply is located at Ashley Road Depot. The store holds approximately 1,500 tonnes of grit. There is generally a 4 week lead in time from the order of grit to the supplies being received. It is the policy of the Council to enter each month in the core winter season with grit supplies of at least the following levels:

- 1st November, minimum of 1,500 tonnes;
- 1st December, minimum of 1,200 tonnes;
- 1st January, minimum of 900 tonnes;
- 1st February, minimum of 900 tonnes; and
- 1st March, minimum of 900 tonnes.

Should these minimum stock levels not be met at any given time, orders will be placed to bring the supply up to at least the minimum level. If there is a run on grit during any given month then a decision will be taken to order further supplies as and when required. The Contractor will be required to provide the Council with daily stock estimates during times of grit stock use to ensure that orders can be triggered if there is a risk of dropping below minimum tonnages.

The minimum stock level of 900 tonnes is in compliance with the Council's commitment to meet the minimum standard laid down by the UK Road Liaison Group's (UKRLG) recommendation, which provides enough grit to be stored to treat the whole of the Priority 1 Carriageway network 6 times in 6 days.

It should be noted that in the event of a national emergency, the Government may form a National Salt Cell, taking control of grit supplied to Highways Authorities. This is very unusual but has happened in the last 2 winters. In this event, the arrangements for maintaining the minimum supplies of grit shown

above will not be valid and the Council will have to rely on the grit it has in stock at that time and any allocation that is agreed by the National Salt Cell.

A2 Client and Service Provider risks and responsibilities

Each winter, usually from late autumn to early spring, the Contractor provides twenty-four hour control of gritting operations throughout the Borough, except for Red Routes which are covered by Transport for London (TfL) working for the Greater London Authority (GLA).

Transport for London (TfL) is responsible for the Winter Service on Red Routes. In Haringey the Red Routes are:

- A1 (Archway Road and Aylmer Road);
- A503 (Seven Sisters Road); and
- A10 (Great Cambridge Road; part of The Roundway; part of Lordship Lane; Bruce Grove and part of Tottenham High Road including the gyratory system - Monument Way, The Hale, Broad Lane).

The Client’s responsibility includes for the provision of adequate grit supplies, the appointment and monitoring of a contractor to apply the salt, issuing instructions to the contractor in severe weather, based on meteorological forecast data, and ensuring the completion of a snow log which is a complete record of all gritting operations to deal with ice and snow.

The contractor is responsible for the provision of the appropriate equipment and necessary resources to apply grit at specified spread rates, to respond to instructions to treat highways and to provide accurate records of all gritting operations.

The following shows the split of the main Winter Service responsibilities:

Preparation of Winter Service Operational Plan	Haringey Council
Grit Purchase	Haringey Council
Routing (pre-salting and snow clearance)	The Contractor
Vehicles/plant	The Contractor
Decision Making	The Contractor for frost patrol activity. The Contractor and Haringey Council for pre and post treatment
Operational Supervision	The Contractor
Staffing Levels	The Contractor

Performance Monitoring	The Contractor and Haringey Council
Grit Bin filling	The Contractor
Maintain Snow Log	The Contractor

A3 Partnership or shared risks and responsibilities

The Winter Service is provided primarily by The Contractor. Haringey Council has responsibilities as listed in A2 above.

A4 Decision making process and responsibilities

CLIENT CONSIDERATIONS

The decision to grit in the light of expected freezing conditions is with the Contractor's Manager except when severe weather or snow is expected when the decision to suspend other work relies upon the agreement of the Authorised Client Officer.

For further information on decision making process please refer to Appendix A.

It is generally necessary for routes to be gritted in a numerical order. If reports of road conditions indicate that alterations would be advisable it is for the Contractor's Manager to determine and notify the Authorised Client Officer.

OTHER COUNCIL SERVICES ICE AND SNOW TREATMENT PROCEDURES

Leisure Areas including parks and open spaces

The Leisure Service is responsible for creating a plan for treatment of ice and snow in the external areas of all Leisure Centres, Leisure buildings, depots, parks and open spaces

Housing Estates (managed by Homes for Haringey)

The Director of Homes for Haringey (HfH) is responsible for creating a plan for treatment of ice and snow in the external areas of Housing Estates. (It is acknowledged that HfH would use the operatives normally deployed to estate cleansing to carry out its own Winter Service plan and that it is currently the same contractor that would do this as it is for the main highways Winter Service. Nevertheless, a separate Winter Service plan for HfH Estates is required to ensure there is a clear and independent response when required.)

Industrial Estates and External areas of Council Buildings

Head of Property Services is responsible for creating a plan for treatment of ice and snow in the external areas of industrial estates and external areas of Council buildings.

External areas within School Properties

The Director of Children and Young People services in partnership with individual schools is responsible for treatment of ice and snow in the external areas of school premises and other education establishments within the control of the Council.

Residential Care Homes – External Areas

The Director of Adult Culture and Community Services is responsible for treatment of ice and snow in the external areas of Residential Care Homes and other premises within the control of ACCS.

Advice and Support

The Environmental Resource Service provides advice and support to other Council Services to assist in planning for and carrying out their Winter Services. This advice and support can also be provided for Haringey Strategic Partners if required.

A5 Liaison and communication arrangements with other authorities and other public services

Neighbouring Authorities

The public travel roads expecting a consistency that is very difficult to achieve across borough boundaries. The fact that a road is treated in a neighbouring borough but not in Haringey is hard for the ordinary road user to understand, even if they know where the various borough boundaries are.

Therefore it is important to have liaison with the different decision makers in neighbouring authorities. There will obviously be times when it is not appropriate to treat roads in Haringey when it might be in other Boroughs. There could equally be times when it is appropriate to treat routes in Haringey and not in other neighbouring authorities. However, the possibility of people coming over a boundary onto an icy untreated Borough road should be considered in any decision making process.

A decision making e-mail will be sent to each neighbouring authority and TfL each day when Winter Service action is going to be taken. This e-mail will provide details of what gritting activity is planned (Frost Patrol, Pre or Post-Treatment) and which areas will be treated (Priority Number and Surface Type) to notify them what Haringey is doing. Note this will only happen when it is likely that treatment will occur.

Contact details can be found in Appendix A. These details are provided to key personnel involved in the provision of Winter Service response to ensure ease of contact during a Winter Service mobilisation event and are confidential. Enquiries from the public should be handled by the Haringey Enterprise or Council Call Centres.

Transport for London

The Red Route roads in the Borough are the responsibility of Transport for London (TfL), part of the Greater London Authority (GLA). It is their responsibility

to treat the carriageways, pavements and cycle paths of the following roads and parts of roads that are within Haringey. The roads that TfL are responsible for in Haringey are detailed in Section A2 above.

The possibility of people coming off a treated Red Route onto an untreated major borough road should be considered in any decision making process.

Registered Social Landlords

Registered Social Landlords (RSLs), especially those in control of large estate areas, have responsibility for treating snow and ice on their land. Advice and assistance can be provided by the Environmental Resource Service to help them do this.

Thames Water Sewers

In the unlikely event that accumulated snow has to be disposed of, permission is required from the Thames Water for clean snow to be deposited into their sewers, in such a manner as to avoid any obstruction in the sewers. In all cases it is the Authorised Officer that seeks approval.

When snow is being deposited into the sewers a Contractor Supervisor must be stationed at the open inspection cover.

All drivers are required to enter the loads on their log sheet together with their time of arrival at and departure from the sewer inspection cover. The Supervisor in charge at the sewer must sign the log sheet against the time shown.

A6 Winter risk period

The winter season will commence on 1st November 2010 and full standby arrangements will be in place until 31st March 2011

In the unlikely event of adverse weather conditions outside of this period contingency arrangements are in place to respond accordingly. The monitoring of the weather conditions together with the decision making process will be run fully from 1st October 2010 though to 30th April 2011

In the event of a period of severe weather, contingency arrangements include the suspension of street cleansing so that Street Cleansing operatives can carry out manual gritting of pavements. If at any time it is unsafe to collect refuse or recycling without prior treatment of carriageways and footpaths, gritting activity to support refuse and recycling collections will be attempted provided other priority work has been satisfactorily completed. In very severe weather it is sometimes necessary to suspend refuse and recycling collections. In this scenario the refuse and recycling operatives would be deployed to manual gritting activities, primarily in locations where it will assist the early resumption of refuse and recycling collections.

A7 Resilience standard

RESILIENCE

Authorities should consider, consult on and formally adopt local service standards for resilience of their Winter Service in terms of number of days

continuous severe conditions salting on a defined Minimum Winter Network for the Overall Winter Period and for the Core Winter Period.
(Recommendation 2)

Establishing a Winter Service resilience standard requires consideration of the number of days resilience to be adopted, definitions of the Overall Winter Period₁ and Core Winter Period₂, whether it should refer to the normally salted network or to a smaller locally determined Minimum Winter Network₃.

₁ Overall Winter Period – Locally defined since the winter period may vary according to climatic conditions, but usually at least the beginning of October to end of April.

₂ Core Winter Period – Locally defined since the winter period may vary according to climatic conditions, but usually at least December to February inclusive.

₃ Minimum Winter Network – That part of the carriageway network normally treated in winter which provides a minimum essential service to the public, including strategic routes, access to key facilities and other transport needs.

It is suggested that at least 6 days resilience for salt and other resources, including equipment, drivers and fuel, would represent sensible good practice for determining the number of days' resilience during the Core Winter Period. This is based on a number of days' severe conditions plus replenishment time and taking into account weekends, and combinations of public holidays and weekends such as Christmas and the New Year.

This approach based on a reasonable number of days' resilience in the ability to deliver a defined Winter Service should ensure that highway authorities hold or have easy guaranteed access to sufficient salt, gritters and drivers and other essential resources to deal with severe winter weather conditions.

Some highway authorities may already have a good level of resilience, but if individual authorities decide they need to increase resources, they will need to consider the practical implications and a reasonable implementation period. Implications may include any new arrangements or facilities required and cost.

In developing their local service standards based on days' resilience, authorities should assess the risks that are faced in the delivery of the Winter Service. The assessment should cover all items of policy and management including:

- network for treatment;
- adjoining highway networks;
- grit management policies;
- operational resources (including equipment, salt stocks and fuel);
- access to Winter Service depots and salt storage areas;
- staff training;
- availability of operational staff.

CLIMATE CHANGE

It is now acknowledged that the world is experiencing a rapidly changing climate.

It is generally accepted that although weather is likely to be milder and wetter in winter, there may be more occurrences of severe weather events.

The effects of climate change make it difficult for highway authorities to anticipate winter conditions from year to year. Wide variation and extreme events as a consequence of climate change needs to be taken into account in Winter Service planning. The events of the 2008/09 winter provide evidence of what can happen and are reviewed in detail in the UKRLG report *Lessons from the Severe Weather February 2009*.

Authorities should review their approach to climate change and in particular their resilience to prolonged cold weather. **(Recommendation 3)**

The winter of 2008-09 led to a review of service resilience and although Haringey along with all other Authorities did not run out of salt, for some this was due to provision of mutual aid supplies. In order to ensure a minimum service is able to be delivered across London a resilience network has been devised. The winter of 2009-10 required Haringey along with the rest of London to use this resilience network when the shortage of salt again led to national restrictions in another very severe winter. This has led to a review and changes have been made as a result.

Currently there is only a carriageway resilience network and it is hoped a similar London wide footway resilience network may be achieved. In very severe conditions, like the winter of 2009-10, it may be necessary to restrict or stop all non-essential gritting activity in order to conserve resources so as to ensure 6 days salt stock for the resilience network. The minimum grit supply arrangements shown in the Section 5 of the Executive Summary above are in keeping with the requirement to hold at least 6 days of grit to keep the main gritting routes treated.

A8 Legislative background

The Code of Practice gives the following summary of the legislative background:

The statutory basis for Winter Service varies in different parts of the UK. In England and Wales Section 41 (1A) of the Highways Act 1980 was modified on 31st October 2003, by Section 111 of the Railways and Transport Act 2003. The first part of Section 41 now reads:

"a) The authority who are for the time being the highway authority for a highway maintainable at the public expense are under a duty, subject to subsections (2) and (3) below, to maintain the highway.

b) (1) In particular, a highway authority are under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice."

This is not an absolute duty, given the qualification of "reasonable practicability" but it does effectively overturn previous legal precedence, albeit not with retrospective affect. Section 150 of the Highways Act 1980 still imposes a duty upon authorities to remove any obstruction of the highway

resulting from “*accumulation of snow or from the falling down of banks on the side of the highway, or from any other cause*”.

In addition, the Traffic Management Act 2004 placed a network management duty on all local traffic authorities in England. It requires authorities to do all that is reasonably practicable to manage the network effectively to keep traffic moving. In meeting the duty, authorities should establish contingency plans for dealing promptly and effectively with unplanned events, such as unforeseen weather conditions, as far as is reasonably practicable.

Given the scale of financial and other resources involved in delivering the Winter Service it is not reasonable either to:

- provide the service on all parts of the Network;
- ensure running surfaces are kept free of ice or snow at all times, even on the treated parts of the network.

The Code of Practice has 20 recommendations and these could be seen as Best Practice in any peer review. These are given below:

1. Authorities should formally approve and adopt policies and priorities for Winter Service, which are coherent with wider objectives for transport, integration, accessibility and network management, including strategies for public transport, walking and cycling. They should also take into account the wider strategic objectives of the authority.
2. Authorities should consider, consult on and formally adopt local service standards for resilience of their Winter Service in terms of number of days continuous severe conditions salting on a defined Minimum Winter Network for the Overall Winter Period and for the Core Winter Period.
3. Authorities should review their approach to climate change and in particular their resilience to prolonged cold weather.
4. Authorities should consider whether collaborative arrangements such as shared services, lead authority arrangements, collaborative service procurement, and sharing depots and salt stock, would provide an effective and value for money approach to increasing Winter Service resilience.
5. Authorities should determine critical areas and infrastructure in conjunction with key public services and other stakeholders and seek to ensure that appropriate winter treatment has been considered by the appropriate party.
6. Authorities should ensure effective communication of information for the public before and during both normal and severe winter conditions.
7. Authorities should ensure that there is appropriate consultation and communication with other highway authorities, key public services and other stakeholders to ensure improved service for the public.
8. Authorities should formally approve, adopt, and publish, in consultation with users and key stakeholders, a Winter Service Plan based on the principles of this Code.
9. Authorities should define treatment route plans for carriageways, cycle routes and footways for pre-treatment and snow conditions, based upon

- the general maintenance hierarchy, but adapted to take into account the factors identified by this Code.
10. Authorities should prepare contingency Winter Service Plans for severe weather conditions which include possibilities such as salting a Minimum Winter Network. Authorities should seek agreement on plans in advance with other highway authorities and key public services such as hospitals and public transport providers. There should be a co-ordinated approach to implementing Minimum Winter Networks across adjacent highway authorities.
 11. Authorities should explore the potential for mutual aid in salt supply and other aspects of Winter Service and should make contingency arrangements in advance.
 12. Authorities should take full advantage of decision support systems and services to enable timely, efficient and accurate decision making.
 13. Authorities should continually monitor performance during service delivery and respond effectively to changing conditions or network incidents.
 14. To ensure appropriate level of competence, training and development needs of all personnel should be established and reviewed annually, including health and safety and appropriate vocational qualifications. Training should then be provided where appropriate before the Winter Service season.
 15. Authorities and relevant organisations should provide training and conduct periodic exercising to test plans for responding to severe weather events.
 16. Authorities and salt suppliers should treat the supply of salt as a service rather than a simple commodity purchase.
 17. As a means of enhancing local salt storage capacity, authorities and salt suppliers should jointly consider supplier owned salt stocks held on a short or long term basis in a number of widely distributed locations around the country. A joint approach may include agreements such as purchase of some or all stock by the end of a season or provision of land.
 18. Authorities should seek a broad approach to salt supply, for example establishing framework contracts with more than one supplier.
 19. Authorities should consider whether efficiency benefits can be obtained from collaborative salt procurement and should also consider ways to improve the balance of risk between salt suppliers and themselves, e.g. longer contracts, performance contracts with minimum guaranteed purchase and supply, and contracts that include supply of salt and investment in facilities.
 20. All aspects of the Winter Service Plan, including service delivery arrangements, should be reviewed annually in consultation with key stakeholders to take account of changing circumstances.

B ROUTE PLANNING FOR CARRIAGEWAYS, FOOTWAYS AND CYCLE ROUTES

Treatment Routes

Authorities should define treatment route plans for carriageways, cycle routes and footways for pre-treatment and snow conditions, based upon the general

maintenance hierarchy, but adapted to take into account the factors identified by this Code. **(Recommendation 9)**

The treatment routes for Winter Service should take as a starting point the hierarchy developed for other maintenance purposes but this is likely to require extensive modification to consider:

- wider transport and other policy priorities referred to above;
- special requirements of carriageways, footways and cycle routes;
- safe and reliable access to emergency facilities including Fire and Rescue, Police, Ambulance Services and hospitals;
- other public services access needs and critical infrastructure where the maintenance of access may be critical;
- public transport routes and access to stations, bus garages and depots;
- safe and reliable access to main industrial and business centres of key importance to the local and regional economy;
- any significant variation between summer and winter traffic;
- accessibility dependencies of remote communities for example Scotland's island and peninsular communities;
- the special needs of disabled people or older people particularly where these can be effectively targeted;
- known problems, including significant gradients, exposed areas and other topological factors;
- climatic and thermal capacity differences within the area;
- co-ordination and co-operation with other authorities.

Consideration of these issues is likely to suggest differences in networks adopted for each element of Winter Service. Such decisions will usually not be clear cut. For example treatment of footways will differ from carriageways and for low traffic roads it may be difficult to justify high priority for service provision.

Risk assessments should be undertaken to establish which routes should be included in a programme of treatment during winter. In particular, the treatment of carriageways, footways and cycle routes must be considered taking account of risk to all highway users and consideration of the available resources.

Where the authority is actively promoting facilities, or there are clear trends of increasing use, a more proactive approach to Winter Service may send an important message.

Transport interchanges perform a key role in the delivery of integrated transport, which should be reflected in Winter Service policies and priorities. These include airports, rail and bus stations and the means of access to them whether by main routes for walking, cycling, public transport or car. Parts of the interchange may be subject to differing management regimes and it will be important to agree common standards and ensure effective co-ordination of resources.

It should be recognised that many authorities will have difficulty treating all bus routes as part of their precautionary salting routes. The treatment of bus routes should be based on risk assessment of local circumstances such as service frequency and their importance to integrated transport services. It is important that treatment routes include the access roads to bus garages.

Similar considerations apply to school bus routes where, although authorities should endeavour to provide Winter Service support, there may be practical difficulties in wide spread treatment of such a diverse network.

In general salting should not be undertaken between the stop lines of level crossings, even when covered with snow. Before ploughing over a level crossing the driver must stop and telephone the signalman for permission to proceed and then inform the signalman when past the crossing. Snow blowers must not be used on level crossings.

One means by which authorities can assist the local community in areas not on priority routes or at known trouble spots, including gradients and sharp bends is by the provision of public access salt bins. Where these are provided authorities should make arrangements for their replenishment as necessary and to ensure that they do not become unsightly or used for the unauthorised disposal of waste.

B1 Carriageway routes by risk level

Carriageways for Pre-Treatment

The total length of roads in Haringey for gritting under this Plan is 340 kms. Private roads and roads on Homes for Haringey Estates are not generally treated as part of this plan. The only exceptions to this rule are non-public highway carriageways that carry bus routes. These are a few carriageways passing through Homes for Haringey estates on Broadwater Farm and Ferry Lane, along with Alexandra Palace Way, as it is not feasible for those responsible for these carriageways to be in a position to respond quickly and with the right equipment in a severe weather event.

All carriageways for pre-treatment have a speed limit of 40 mph or less and are defined as Built up roads. The Priority 1 carriageway gritting routes (including TfL) cover about 37% of the total length of roads in the Borough and is considered to be an adequate level of provision, leaving the less used roads to be treated only in the worst of conditions and after the top priority routes have all been made as safe as possible.

All carriageways will be treated during the winter according to their level of priority. During pre and post treatment gritting activities, Priority 1 carriageways are the highest priority and will always be treated first. Provided that gritting of Priority 1 carriageways has been satisfactorily completed, and subject to there being no pressure on salt stock levels, treatment of Priority 1A carriageways can proceed if the on-going snow/ice/weather situation warrants this. Following this, gritting of Priority 2 carriageways can proceed if the on-going snow/ice/weather situation warrants this. Finally, provided that gritting of Priority 1, 1A and 2

carriageways has been satisfactorily completed, and subject to there being no pressure on grit stock levels, treatment of Priority 3 carriageways can proceed if the on-going snow/ice/weather situation warrants this.

It is quite unusual for an on-going severe weather event to last so long that it becomes necessary to consider gritting Priority 3 carriageways. This is because it is usually the case that in an on-going severe weather event, Priority 1 and 2 carriageways require repeat gritting to keep them open, thereby reducing the likelihood that any Priority 3 carriageway gritting will be undertaken at all. In a situation where Priority 3 carriageway gritting is undertaken, the order in which this will be carried out will be such that it supports the provision of refuse and recycling collections.

To be effective, grit must be spread evenly and at rates to suit prevailing weather conditions.

Frost Patrol – Main Roads (Non Red Route)

Haringey has a Frost Patrol for precautionary gritting on approximately 44 kms. Frost patrols will provide for a programme of mechanical gritting of a network carriageways based on the following criteria:

- carriageways with the steepest gradients likely to cause vehicles to slide and not stop even when brakes are applied; and
- carriageways, with steeper gradients that are more likely to ice over and for longer due to exposure and/or due to elevation.

For the list of carriageways covered by Frost Patrols please see Appendix B.

Priority 1 Carriageways (Non Red Route)

Haringey has a Priority 1 carriageway gritting network of approximately 124 kms which provides for a programmes of mechanical pre or post-treatment gritting based on the following criteria:

- carriageways with the steepest gradients likely to cause vehicles to slide and not stop even when brakes are applied;
- carriageways carrying the heaviest vehicular traffic; and
- carriageways serving Special Educational Needs schools.

These roads form the backbone of the carriageway network within the Borough of Haringey and as such the Winter Service Operation should be that of not allowing snow to lay on the carriageway surface. When there is a forecast of snow, the Contractor's Manager should aim to start the gritting programme so that it is completed just prior to the forecast time for snowfall to begin.

The list of carriageways for Priority 1 gritting activity is detailed in Appendix B.

Priority 1A Carriageways

The list of Priority 1A Carriageways has been created for the 2010/11 winter for the first time and provides for gritting of a network of road totalling 24 kms. This is a list of non-Priority 1 carriageways that serve schools in the borough which are

usually listed as Priority 2 and 3 carriageways. The purpose of this new priority category is to provide the opportunity to carry out accelerated carriageway gritting of Priority 2 and 3 carriageways serving schools when a snow event occurs during term time.

The list of carriageways for Priority 1B gritting activity is detailed in Appendix B.

Priority 2 Carriageways

The list of Priority 2 carriageways provides for gritting of a network of carriageways totalling 69 kms. Priority 2 carriageways carry less traffic and have lower risk levels due to gradient and are the next most important carriageways to grit after Priority 1 and 1A carriageways. Also, any carriageway serving a Residential Care Home that is not treated as a Priority 1 carriageway is automatically included as a Priority 2 carriageway.

The list of carriageways for Priority 2 gritting activity is detailed in Appendix B.

Priority 3 Carriageways

Priority 3 carriageways carry the least volumes of traffic and have the lowest risk levels compared to Priority 1 and 2. It is desirable to grit Priority 3 carriageways but this will only be considered as and when Priority 1 and 2 carriageways have been satisfactorily treated and only then if there is no pressure on grit stocks.

The list of carriageways for Priority 3 gritting activity is detailed in Appendix B.

Contingency Arrangements - Resilience Network for Carriageways

If there are extreme conditions where salt supplies are limited or other resources are restricted (such as fuel supplies or drivers) contingency arrangements are required to ensure that a reduced network of carriageways can continue to be gritted. This is called the Resilience Network.

A Resilience Network of carriageways has been developed in partnership with Transport for London and neighbouring boroughs which ensures that Haringey forms part of a London-wide network of roads designed to keep the capital moving. This network of roads primarily targets the continuation of bus routes and the ability of the Police, Fire and Ambulance services to continue as normal and respond to emergency calls.

Any decision to resort to gritting the Resilience Network only would normally be made by a meeting of the Council's Risk and Emergency Planning Steering Group. Further details about the intervention of this group are provided at D15, Escalation and Emergency Operating Procedures. In very exceptional circumstances the Authorised Officer may make a decision to resort to the Resilience Network. This would be required to be reported to the Council's Risk and Emergency Planning Steering Group within one working day with an explanation for the decision and for approval to be requested to continue with Resilience Network gritting only – if this is justified.

The list of carriageways for Resilience Network gritting activity is detailed in Appendix B.

Annual Review of Carriageway Priorities

The priority route system will be reviewed annually to take into account alterations to bus routes, new traffic management schemes and other changeable factors. Dry runs will be made to test the practicality of the routes and amendments made where necessary.

Carriageway routes for post-treatment by risk level

The priority routes for post-treatment are the same as they are for as for pre-treatment but with increased spread rates as per section F8 depending on the prevailing and forecast weather conditions.

Carriageway routes for snow clearing by risk level

Snowfall on Roads

When snow is forecast to fall in the Borough, conditions are monitored very closely so that, if possible, all Priority 1 carriageways can be gritted before snowfall commences. It can be difficult to predict when rain may turn to snow and vice versa. Consequently an inaccurate forecast or a well-intended decision to grit can occasionally lead to unnecessary gritting.

Gritting does not take place whilst rain is falling, as it will be washed away. This may lead to an unavoidably delayed response to the deteriorating road conditions and sometimes this is perceived by the public, erroneously, as a failure to respond on behalf of the Council.

When snow falls in succession over a number of days, all gritting vehicles will be mobilised to keep a high concentration of grit on the roads. At such times, numerous complaints or reports of packed snow lying on lower priority roads will be received from the public and from other sources. Except in the case of emergencies or some other justifiable need, these will only be addressed when the higher priority routes are fully treated, thereby ensuring maximum efficiency through planned, proactive gritting rather than unplanned, reactive gritting which can be inefficient.

In England and Wales, Highway Authorities had until recently only a statutory duty under Section 150 of the Highways Act to remove obstructions. Snow is considered to be an obstruction when it impedes use of the road network. With the legislation now enacted this duty is now being extended to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

The Council has therefore adopted the Institution of Civil Engineers design and practice guide "Highway Winter Maintenance" as far as is applicable to an urban situation like Haringey, where heavy snowfalls are very infrequent. It would usually be inappropriate to use snow ploughs, blowers or similar plant even if there was sufficient snow fall to justify the expense, due to the urban nature of the network, with parked cars and pedestrians in almost all streets.

It is expected that severe weather warnings will be provided by the weather forecaster, MeteoGroup, in advance of any significant snow falls. In the event of

sudden changes there will be an update to the forecast. If in doubt the forecaster can be spoken to directly to enable clearer understanding of the local situation.

Although London in general rarely gets significant falls of snow, if heavy snow is forecast the following information from the Highway Winter Maintenance Guide by ICE may well be useful: (this has been modified to meet Haringey's circumstances).

On receiving the snow warning the following procedure should be carried out:

1. Pre-treat the spreading network in accordance with the rates given in section F8 immediately prior to snow falling to prevent snow settling on the road surface.
2. Retreat uncompacted snow with salt (grit) at 10 g/m² per 25 mm of snow.
3. When prolonged falls are forecast it will be found useful to continuously treat from the onset of snow to prevent build up and to prevent compaction by traffic. Such treatment should be at 20-40 g/m² so that a wet base is maintained.
4. A further treatment of salt (grit) is required at the rate of 10 g/m² for every 25 mm of uncompacted snow for each degree centigrade that the air temperature is below freezing.
5. If snow has become compacted and the temperature is low (- 5°C or below) neat salt (grit) must not be used, as it will accumulate in the form of salt solution in depressions and produce a very uneven and slippery running surface. In these circumstances spreading of fine aggregate, like coarse sand, is advised.
6. A 50/50 fine aggregate/salt (grit) mix should be used on hard-packed snow. Fine aggregate is not required on uncompacted snow as the action of salt (grit) will cause the snow to melt.
7. Very low temperatures do not usually follow immediately after a snow fall and it is therefore very important to apply salt (grit) early, and then do so again to try to get the resultant slush off the road before compaction by traffic.

The carriageway network should be cleared in the order of priority shown above. detailed at B1 above.

Post-snow actions

After the snow period it is important that all gullies and drainage outlets are cleared of any accumulations of grit. Carriageway channels and footpaths where grit residue remains should be swept.

All vehicles and equipment should be cleaned, lubricated and checked.

All grit bins should be checked and refilled as necessary.

Priority Points to be Gritted Manually

For the most part carriageways will be gritted by mechanical spreading vehicles, but the Contractor's Manager will be responsible for seeing that narrow access or

very steep sections of road are gritted manually, if required, as soon as snow clearing operations are started.

Leisure Areas, Homes for Haringey Estates, Industrial Estates, Council Premises, School Premises, Residential Care Homes

It is the responsibility of individual services to create plans for treatment of ice and snow on the carriageways they manage, as referred to in Section A4 above.

B2 Response and treatment times for all carriageway treatments

The target response times are currently at the discretion of the Contractor within the Contract. These are under review and will need to be reviewed and set out in detail in future plans. This will be done in conjunction with the competitive dialogue process underway in the summer/autumn of 2010 for the Waste and Other Services Contract due for award late in 2010 for commencement in April 2011. Therefore, target response times are expected to form part of the 2011/12 Winter Service Operational Plan.

The treatment time, which is the period between vehicles leaving the depot and the completion of each priority carriageway route, is dependant upon weather conditions, traffic conditions, reliability of plant and vehicles, availability of trained personnel and efficient use of resources.

In most cases frost patrols are undertaken overnight and are completed by the time ice has started to form and before the rush hour commences.

Often pre-treatment in readiness for snowfall is carried out at night with the target being to complete the Priority 1 carriageways and pavements by 7.30am if possible and before snowfall has begun.

If snow falls which has not been predicted, the Contractor's Manager and the Authorised Client Officer will decide whether any work should be suspended and will mobilise gritting vehicles as soon as possible with gritting of the Priority 1 routes first. The time taken to complete this operation will depend on traffic congestion and the varying weather conditions.

Under such circumstances public reports and gritting requests will be widespread and the only action available is to continue gritting and snow clearance pro-actively until the weather conditions ease and the situation becomes controllable again. The only exception to this will be to respond reactively to emergency service requests and any non-priority ad-hoc requests of a justifiable nature.

Daytime gritting is disrupted by traffic, consequently every effort is made to have any wet roads gritted before the temperature drops below zero and, if possible, before the busy early morning or afternoon traffic.

Footpaths are normally only treated during periods of prolonged and severe weather conditions. Separate cycle paths are not gritted separately but in prolonged conditions may be cleared of snow when other higher priority gritting has been satisfactorily completed.

OPERATIONAL PLAN

Currently, there are four gritting vehicles available at Ashley Road Depot from 1st October this year, two of these are dedicated gritting vehicles and two are demountable gritting vehicles. Routes will be allocated by the Contractor's Manager who is on duty and must be strictly adhered to.

The Winter Service operation will be controlled from Ashley Road Depot, to clear snow, ice or frost from all Borough highways including all bus routes and should be operated 24 hours a day until this task has been completed.

Drivers must follow the procedures laid down in the Winter Service Operational Plan with due regard to loading of grit, the number of loads and returning completed rounds.

All gritting operations must be completed in the order of priority as set out at Section B1 above, unless instructed otherwise by the Authorised Client Officer.

All work will be co-ordinated by either the Contractor's Manager, or their delegated Manager.

Gritting will commence within two hours of being notified by either the Contractor's Manager or the Authorised Client Officer, or at a time agreed in advance that may be longer than two hours between the decision to grit and the gritting commencement time.

Routes will be allocated by the Contractor's Manager on duty and must be strictly adhered to.

B3 Routes for footbridges, subways and other high risk pedestrian areas

Consideration has been given to which parts of the pedestrian network present the highest levels of risk in the event of ice and snow.

A list of locations for spot treatment in the event of a frost forecast has been developed.

Separate lists of pavement gritting have been developed for more widespread treatment in the event of a forecast of snow or during and after snowfall

It is considered that dropped kerbs and crossings on main roads present a higher risk of injury and these will be treated as part of the priorities.

B4 Response and treatment times for footway and cycle route treatments

Footways and separate cycle paths

The target response times are currently at the discretion of the Contractor within the Contract. These are under review and will need to be reviewed and set out in detail in future plans. This will be done in conjunction with the competitive

dialogue process underway in the summer of 2010 for the Waste Management Contract due for award late in 2010 for commencement in April 2011. Therefore, target response times are expected to form part of the 2011/12 Winter Service Operational Plan.

In most cases spot treatment of pedestrian locations in response to a forecast of frost is undertaken overnight and completed by the time ice has started to form and before the rush hour commences.

It is often the case that pre-treatment in readiness for snowfall is carried out at night with the target being to complete the Priority 1 routes by 7.30am if possible and before snowfall has begun.

If snow falls which has not been predicted, the Authorised Client Officer and Contractor's Manager will decide what work should be suspended and will mobilise footpath gritting activity soon as possible, and will arrange the gritting of the Priority 1 pavements first. However, the time taken to complete this operation will depend on traffic and weather.

Under such circumstances public reports and complaints will be widespread and the only action available is to continue gritting and snow clearance until the weather conditions ease and the situation becomes controllable again.

Separate cycle paths are not usually gritted but in prolonged conditions may be cleared of snow when other higher priority manual footpath gritting has been satisfactorily completed.

B5 Routes for other footway and cycle route treatment by risk level

Footways

If snow falls and settles priority will be given to treatment of footways in all major shopping streets, at transport hubs, outside residential care homes, emergency services premises and hospitals. Also included in this list are bus station approaches and terminus points. Pedestrian crossings, subway entrances and stairways will also be treated as priority areas.

There are four priorities of footway gritting, and it is unlikely that resources will permit Priority 3 or 4 to be covered unless there are several days of settled snow.

Priority 1 – Town Centres, Residential Care Homes, transport hubs, hospitals, emergency service premises, dropped kerbs, bus stop areas and crossing points on main roads.

Priority 2 – footpaths leading from Priority 1 pavement gritting areas to school entrance and exit points (term time).

Priority 3 – footpaths on residential roads to support refuse and recycling collections.

Priority 4 – remaining footways and separate cycle paths.

For the list of footpath areas covered please see Appendix M.

If snow has settled on a footpath and cannot be treated by grit alone, a pathway of 1.2 metres must be cleared of snow and gritted manually to allow two pedestrians to pass each other without obstruction.

Whenever possible, banking of snow will be avoided when clearing the footway. Where banking occurs a pathway should be cleared to the kerb edge every 25 metres or so and where obvious crossing points exist.

A pathway should also be cleared to give access for pedestrians to use telephone kiosks, bus shelters and post boxes.

Annual Review of Footpath Priorities

The priority route system for pavement gritting will be reviewed annually to ensure that it takes account of any changes that may be necessary.

Mechanical Clearance

Upon receipt of snow warning and where practicable, mechanical pavement gritting will be carried out, if available.

Heaping of Snow

Snow must not be heaped or made into ridges unless special dispensation is given by the Authorised Officer.

Heaping of snow must on no account be made on pedestrian crossings or bus stops. If heaps or ridges are made in the channel, a space of not less than 30 cm (1'0") wide must be left between the snow and the kerb to allow for drainage and sufficient space must be left between the heaps or ridges for the convenience of pedestrians.

Gully grates must be kept free from obstruction

Cycle paths

Cycle paths which are part of the carriageway are gritted as part of the carriageway priority gritting plan.

Separate cycle paths are not prioritised for gritting for the reasons referred to at Section 5 of the Executive Summary above.

B6 Allocation of plant, vehicles, equipment and materials to routes

The Contractor's Manager will allocate vehicles plant and other equipment to those best suited for the needs of the routes. The smaller vehicles will be used for the narrower streets. The larger vehicles will be used to try to prevent need for return to depot for additional grit within a run.

B7 Location and maintenance of grit bins and grit heaps;

Grit Bins on streets

Within the current Winter Service Plan, grit bins are provided at 103 locations that present particular snow and ice problems, such as steps, steep gradients or areas used by people with mobility issues. Consideration will be given to extending the number of grit bins at 47 locations in response to feedback from residents and Members following the severe winter of 2009/10.

For the list of locations with grit bins please see Appendix N. Also shown in Appendix N is the list of locations where new grit bin installations are being considered.

Grit Bins supporting public sector services

During the winter, there has historically been demand for grit to be provided at schools, day centres, libraries, elderly persons homes and neighbourhood offices. Services with outdoor areas have been encouraged to create their own Winter Service Plans to help make them as self-sufficient as possible during future winters. The Environmental Resource Service will assist in preparations for winter at these locations - including provision of grit, grit bins and bagged grit supplies. Assistance will be provided during the winter season but it is unlikely that the Environmental Resource Service will be in a position to provide a swift response during a severe weather event.

Annual Review of Footpath Priorities

The priority route system will be reviewed annually to ensure that it takes account of any changes that may be necessary and also takes account of any valid requests for new grit bin installations.

B8 Special sites or features (e.g. near railways or traffic calming).

There is one level crossing which is at Marsh Lane N17. This is on the Priority 1 network. Network Rail issue guidance which should be adhered to at all times. This is given in Appendix P. There are no other special features that cause special difficulty or consideration in treatment of roads at present but if any are identified they will be accounted for as part of the annual review of the Plan.

C WEATHER PREDICTION AND INFORMATION

C1 The decision making process

See section I6 for details.

C2 Road weather information bureau service

Haringey's Contractor receives weather forecast information from their supplier. Enterprise currently use MeteoGroup.

C3 Road weather stations

Haringey has no road weather stations at present

C4 Timing and circulation of information

During cold spells and severe weather, Meteogroup provides two written weather forecasts per day. These forecasts are Haringey-specific. If required, the Contractor can call Meteogroup to discuss the forecast in order to aid decision-making. Such calls are most likely to be made when forecasts are marginal and the decision whether to grit or not is not clear cut.

The Contractor is required to share forecast information with Client Officers.

See section I10 for further information.

C5 Road weather forecast

See C2 above.

C6 Reporting procedure

See section I13 for further information

C7 Thermal mapping

See section I4 for details.

C8 Maintenance of ice detection equipment

There is no ice detection equipment currently installed in Haringey.

C9 Information to be provided

Written forecasts provide information about temperatures, precipitation type and volume, ice risk and timings. Forecasts are given for the next 12 hours and 24 hours and, to aid forward decision making, forecasts are also provided for the next 2 to 5 days.

Weather reports will be sent to the Authorised Client Officer by the Contractor's Manager immediately when adverse weather conditions are expected. Each day the Contractor's Manager will complete the Daily Decision Justification Log (Appendix F) and e-mail a copy to the Authorised Client Officer.

Where there is a deterioration or improvement likely during the period of forecast, then the Contractor's Manager must inform the Authorised Client Officer of any likely change in the expected conditions. If necessary a further Daily Decision Justification Log (Appendix F) will be completed and sent by e-mail but telephone confirmation of the change must also be given.

D ORGANISATIONAL ARRANGEMENTS AND PERSONNEL**Resources**

Authorities provide Winter Service through combinations of their own resources and those of service providers contracted to them. There is a wide variety of approaches. Many highway authorities provide some of their own facilities with others provided by the private sector. In all cases, service providers' activities are governed by their contract with the highway authority.

In some authorities refuse collection, street cleansing and grounds maintenance services often provide support to the Winter Service, especially in times of prolonged ice and snow. Arrangements should be made well before the commencement of the season.

Detailed route planning and for each aspect of Winter Service will need to be optimised to ensure economic, efficient and effective resource allocation. This will depend on:

- spreading vehicle characteristics and capacity;
- depot and salt location;
- Response times (the period between decisions being taken to begin treatment and vehicles leaving the depot. It is suggested that authorities should adopt a target response time of no more than one hour. This should apply both within and outside normal working hours);
- Treatment times (the period between vehicles leaving the depot and the completion of treatment on all priority routes. Authorities should adopt target treatment times based on risk assessment of local circumstances that provide for the completion of pre-treatment before ice forming. They should however recognise however that treatment times might vary in different weather conditions).

A key factor in ensuring that response and treatment times are met once a decision has been taken to treat is the availability of appropriately trained personnel. Identifying the extent of resources needed under various scenarios and the potential source of these will be an important aspect of pre-season planning. This planning should cover the whole range of requirements and conditions likely to be encountered, including:

- Pre-season preparation;
- Precautionary treatment;
- Footway and cycle route treatment;
- Post treatment;
- Snow clearance;
- Continuous severe conditions;
- Post snow emergencies (flooding etc).

Planning of resources should cover the entire workforce involved in the Winter Service. It is particularly important not to overlook:

- the need for staff to be available throughout defined risk periods;
- the need for the treatment operations to be co-ordinated and supervised;
- resources and equipment for treating carriageways, footways and cycle routes;
- resources for dealing with vehicle breakdowns, problems with fuel supply and communications failure;
- resources for the storage, delivery and loading of salt.

In planning resources the following issues regarding personnel also need to be addressed:

- implications of Drivers' Hours Regulations;
- extent and nature of double manning and driver support;
- shift system arrangements;
- provision for holidays and sickness.

Authorities in planning their resources should ensure that they are compatible with the resilience standards adopted by the authority.

Authorities often place reliance in times of prolonged ice and snow on temporary contracts with contractors, farmers and others to supplement resources for snow clearing. Arrangements should be made to ensure that necessary insurance cover is in place.

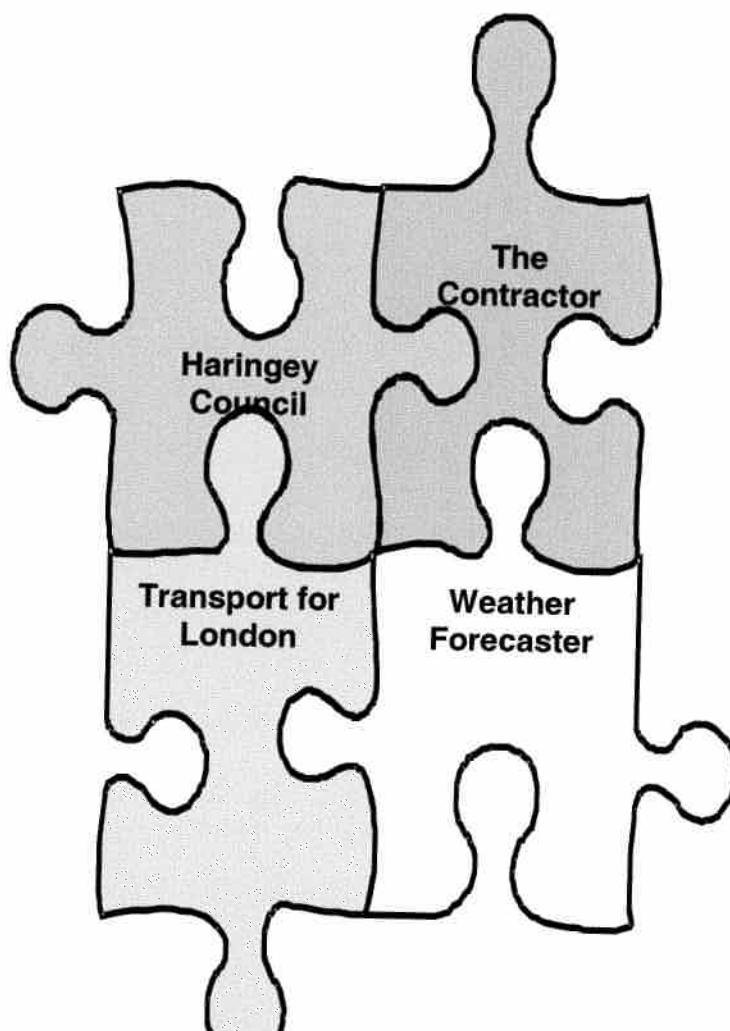
In rural areas, authorities should examine the potential for using local council snow wardens, who may have an effective role in gathering information and providing Winter Service Managers with details of specific local problems. If snow warden schemes are adopted clear terms of reference should be established.

D1 Command, control and operational organisation

The organisational chart is given in D10, but it is important to realise the interlinking of the different parts of the service provision.

This is shown diagrammatically in the figure on the right, showing that Haringey Council is reliant upon not only the Contractor for the delivery of the service and the Meteo Group for the accuracy of the weather forecasts but also on the work of Transport for London (TfL) in gritting Red Routes.

The public expects the Council to get it right every time, and they do not see



complicated relationships and responsibilities. It is therefore important that close working relationships are developed with the other parties involved.

D2 Arrangements with other authorities;

CO-ORDINATION AND COLLABORATION

Authorities should consider whether collaborative arrangements such as shared services, lead authority arrangements, collaborative service procurement, and sharing depots and salt stock, would provide an effective and value for money approach to increasing Winter Service resilience.
(Recommendation 4)

Co-ordination and co-operation between authorities in Winter Service planning including defining treatment routes, response, and treatment times is of crucial importance. This should be a formal process between the adjoining local authorities and with the authority responsible for the strategic network. The intention should be to negotiate effective service integration across administrative boundaries and to enable operation of the plant and vehicles required to achieve adequate resilience.

In these circumstances close liaison both with public transport operators and local authority transport co-ordinators is essential, at the annual review, on an ongoing basis throughout the season and on a continual basis in severe weather conditions. This is particularly important as, although changes to public transport routes and frequencies will be made throughout the season, it will not usually be practical or desirable for consequent changes to the treated network during the season. This may influence the nature and timing of changes to public transport routes.

The efficient operation of many essential public services may be dependant upon ice or snow removal from key areas of private land, which is fundamentally the responsibility of land owners.

Authorities should determine critical areas and infrastructure in conjunction with key public services and other stakeholders and seek to ensure that appropriate winter treatment has been considered by the appropriate party.
(Recommendation 5)

Authorities should explore the potential for sharing depots as this may provide opportunities for efficiencies. Other areas where collaboration should be considered include decision support services for weather particularly where authorities have similar climatic conditions.

D3 Arrangements with other public services

The Council realises the strategic importance of the Highway network to a number of other public services and the arrangements take into account the

latest information on Public Transport changes including revisions to bus routes, railway and underground stations and other transport providers.

Key public buildings especially hospitals are considered as part of the route planning and, where possible, routes are prioritised to enable access to be maintained as much as possible.

The Council also recognises that the Emergency Services have a vital role to play and although not all roads and footways in the Borough can generally be treated, any call for assistance from the emergency services will be responded to with mechanical and pavement gritting as appropriate.

D4 Decision making;

Decisions and Management Information

Authorities should take full advantage of decision support systems and services to enable timely, efficient and accurate decision making.
(Recommendation 12)

Decision support systems and management information are the basis of effective Winter Service delivery. More details are given in the *ICE Design and Practice Guide, Highway Winter Maintenance* published in 2000.

Systems will use current information and trends in conjunction with relevant software to extrapolate and display predicted conditions over a range of periods.

The decision support information will be used by the authority's designated Winter Service controller, or similar, together with local experience, and against the background of a range of pre-determined scenarios, in deciding the action to be taken. The decision should usually be delegated to a single person, although in larger authorities with varying climatic conditions the role may be delegated to two or more persons. Controllers will of course need to maintain close consultation with others both within and adjoining the authority and also those dealing with the strategic network.

A suggested decision making framework, which will need to be adapted for local circumstances, is included in Appendix H (of code of practice).

The quality of decisions made by the controller will be the key factor in determining both the effectiveness of the Winter Service and also how it is perceived by users and the community.

See item I6.

D5 Operational record keeping and reporting

The record keeping is set out elsewhere in this document

- D6 Plant and vehicle staffing arrangements, including management of drivers' hours regulations

STANDBY ARRANGEMENTS

On receipt of instructions to commence Winter Service Operations, the Contractor's Manager on duty will immediately proceed to call in all staff on the Call Out list. The list will be revised as and when required.

Frost Patrol work does not constitute an emergency and the Contractor will be expected to observe the normal legislative requirements on drivers' hours.

- D7 Materials management

Haringey currently uses rock salt for all the carriageway and footway treatments.

- D8 Training and development arrangements;

Training and Development

To ensure appropriate level of competence, training and development needs of all personnel should be established and reviewed annually, including health and safety and appropriate vocational qualifications. Training should then be provided where appropriate before the Winter Service season.

(Recommendation 14)

Issues where training is required are described below. This is not an exhaustive list and will largely be based on local circumstances:

- the content and operation of the Winter Service Plan;
- driving in difficult and hazardous road conditions including duty of care to other road users;
- circumstances where special safety considerations apply;
- snow ploughing, in particular around rail level crossings, tramways, partially segregated areas,
- dealing with emergencies;
- dealing with post ice and snow emergencies especially flooding.

In addition to such specific training it will be necessary to ensure that all personnel are provided with information during operational periods on current network characteristics and constraints, including:

- nature and location of highway works, including statutory undertakers;
- temporary and permanent barriers;
- nature and location of any traffic diversions;
- nature and timing of any events likely to affect network use.

Authorities should prepare specific health and safety policies, guidance, and risk assessments with their service provider. These should be issued and discussed with all personnel, including temporary contractors, and should form the basis of further training as necessary.

Training provided to service delivery personnel should also include specific reference to the health and safety needs of users, including:

- avoidance of spraying pedestrians, cyclists and vehicles where practicable with salt or slush when salting or ploughing;
- avoidance of risks to pedestrians and cyclists when using vehicles in segregated or partially segregated areas and in treating footways;
- ploughing and manoeuvring in restricted circumstances;
- other road vehicles that may not be under proper control.

Authorities should consider both qualifications (e.g. City and Guilds) and practical experience training. Some authorities have found it useful for those personnel involved in Winter Service management and decisions to undertake training in familiarisation and interpretation of weather forecast information.

It is the Contractor's responsibility to employ competent staff in the Winter Service who have practical experience of supervising gritting operations. They will have authority under the contract to make decisions about when to deploy Frost Patrols and liaise with the Council's Authorised Client Officer decisions about pre and post-treatment. The Contractor's Manager will be competent to personally manage and supervise the Winter Service operations.

The Authorised Client Officer has an absolute requirement to secure Winter Service activities on its highways. Before the start of the Operational Period each winter, the Contractor will demonstrate his readiness to perform the following Tasks under the contract:

- Frost Patrols;
- Pre and Post-Treatment; Salting
- snow clearance;
- grit bin maintenance;
- vehicles, plant and equipment provision and maintenance;
- competent management and supervision;
- specialist weather forecasting service; and
- communications.

Prior to the start of the Winter Service Operational Period the Contractor shall use the Dry Run Exercise to satisfy themselves and the Authorised Client Officer that they are fully prepared for the coming Winter Service Operational Period.

The Contractor will ensure that all drivers are familiar with the priority routes and any special arrangements. The Contractor is looking into the appropriateness of requiring that operatives are accredited in accordance with City and Guilds 6159 qualification (previously called 6157) in Winter Services. This proves the Contractor's competence to operate gritting machines with snow plough attachments, therefore it may not be appropriate for the urban environment of Haringey's roads. However there would need to be a decision taken due to it being in the Code of Practice

Loading shovel drivers shall have a Certificate of Training Achievement Award.

All allocated drivers must undergo training prior to operating any vehicle to ensure that they are fully aware of the vehicle operations and systems of allocation as dealt within Winter Service Operation.

D9 Schedules of Contract and Voluntary Personnel (CVP)

Section not used in Haringey.

D10 Employee roles and responsibilities

The following key organisation structure is given below and the roles and responsibilities are as with the normal chain of command.



The responsibility of the various parties follows this chain of command although in general it will be the Authorised Client Officer and the Contractor's Manager who have responsibility on a day to day basis.

D11 Contact and commissioning arrangements for CVP

Section not used in Haringey.

D12 Employee duty schedules, rotas and standby arrangements

Appendix J gives the duty rota for the winter period and lists all the names qualifications and home address and telephone numbers. (This information to be collated and supplied by the Contractor)

The Contractor's General Manager will provide to the Contractor's Winter Service Manager details of drivers capable of operating the mechanical shovel which are to be clearly marked 'Mechanical Shovel Driver'.

The respective Managers will check these lists every Friday afternoon during the winter period and advise each other of alterations due to sickness and holidays.

D13 Winter Service exercising arrangements;**Exercising**

Authorities and relevant organisations should provide training and conduct periodic exercising to test plans for responding to severe weather events.
(Recommendation 15)

It would be beneficial for authorities to build severe weather conditions into regional or local training exercises or to develop specific Winter Service exercises involving adjacent authorities and relevant partners. Such testing of plans and personnel associated with the Winter Service would ensure authorities are fully prepared. It would also assist with ensuring that resilience of Winter Service is addressed and communication networks developed and improved.

Joint exercises have been run with all the London Boroughs and Transport for London in December 2009 and May 2010. These have also involved the Emergency Services and Public Transport operators. This type of exercise will continue to be run as necessary to ensure smooth co-ordination across London.

A dry run is carried out each year prior to the commencement of the Winter period and all gritting vehicles and demountable bodies are checked to ensure they work properly and are correctly calibrated.

D14 Standard operating procedures

These are given in Appendix A.

D15 Escalation and emergency operating procedures

With the experience of the last 2 winters and the extreme shortage of grit nationwide, the need for an escalation process and emergency operating procedure has been included. This should not be seen to be just for grit supply but for any shortage of resource. A serious flu outbreak affecting drivers, a fuel shortage or another reason altogether could lead to a similar need for escalation.

The London Boroughs have established London-wide arrangements for responding to severe weather conditions. The London Local Authority Co-ordination Centre (LLACC) links key local authority Winter Service and emergency planning staff with professional partners in the emergency services and transport sector. In particular, Transport for London's London Streets Traffic Control Centre. Originally established for response to high-impact, spontaneous incidents, it is recognised that the LLACC can fulfil a broadening role in regional severe weather co-ordination by facilitating mutual aid sharing, compiling daily reports, producing stock projections to inform allocations, and maintaining the regional picture through effective information-sharing.

In the event that any cold weather event becomes so prolonged or serious that the standard policies and priority work set out in this Plan cannot be delivered, the Council's Emergency Plan will be used in conjunction with this plan. This will allow for management of communication to the public, decisions to be made about maintaining essential services and the protection of vulnerable people. The Authorised Client Officer will confer with the Emergency Planning Officer who will advise the duty CEMB member of the need to activate the Emergency Plan. It is likely that a meeting of the Risk and Emergency Planning Steering Group will be called to coordinate the Council's response. The Risk and Emergency Planning Steering Group will consider the matters to be addressed in the same manner as any other emergency and follow these up as appropriate. The Emergency Planning Officer may also call a Multi-Agency Silver meeting to liaise with the Emergency Services and other local partners.

It should be noted that any severe weather event of this magnitude will also require national and/or London-wide coordination. Therefore the Council is likely to coordinate its response through the London Local Authority Coordination Centre.

D16 Operational monitoring

The primary responsibility for the work including the normal decision on Frost Patrols is with the Contractor and they will carry out their own supervision and operational monitoring.

During severe weather monitoring will also be undertaken by Client Officers to ensure that the Contractor has responded in a sufficient and timely manner.

D17 Health and safety procedures

The whole operation of the Winter Service is generally carried out in unfavourable weather conditions and often at night. Therefore safety factors are paramount. It

is necessary for every part of the operation to be carefully considered when any new plant or new procedure is introduced.

The Contractor's operatives have undergone health and safety induction training which makes them aware of the safety issues involved in Winter Services as well as who the safety coordinator is.

They are issued with a copy of the Contractor's safety, health and environmental guide, and a copy of site specific rules.

Operatives have signed to confirm that they have received induction and are aware of current procedures involved on site for health and safety matters and emergency procedures are in place.

All safety, health and environmental matters are communicated to operatives by means of toolbox talks, memos or risk assessments.

Training is essential but is not in itself sufficient. Every person engaged on the Winter Service must comply with the following documents at all times:

- Haringey Health and Safety Policy and any company policies applicable to the individual employees;
- Health, Safety and Welfare at Work Employee Handbook;
- Safe Working Method Statements; and
- Risk Assessments for each activity.

It is the responsibility of the Contractor to produce and revise the above and to comply with the Health and Safety at Work Act at all times.

D18 Contingency arrangements

One of the key resource requirements for the Winter Service is trained LGV drivers with the necessary experience of driving the specific vehicles and routes. The winter period is also a time of high risk of flu which can reduce the level of resource. A pandemic was widely expected for last winter which could have seriously restrict the ability of Haringey to carry out this vital service. Therefore it is considered essential that back up trained operatives be available at all times for this kind of possibility. It is up to the Contractor to ensure that contingency arrangements are in place.

During severe weather where it may not be possible to grit all carriageways of every priority level, the build up of compacted ice may occur. Due to the priority arrangements in this plan this should only occur on flat, little used roads. In such circumstances the Police have the power to close roads considered to be dangerous and the Head of Sustainable Transport may erect ice warning signs so that drivers are aware.

E FACILITIES, PLANT, VEHICLES AND EQUIPMENT

In assessing the required plant and vehicles authorities should ensure that sufficient resources are available for the delivery of the Winter Service during severe and prolonged ice and snow. This should be compatible with the resilience standards adopted by the authority.

It is unlikely that, with the level of investment involved, authorities will be able to make frequent changes to the fleet, other than replacement or renewal. It is important however, that opportunities are taken when overall service procurement changes are being contemplated to thoroughly review Winter Service and equipment procurement.

There have been significant advances in the equipment available on the market in recent years. Vehicles are now capable of delivering a range of treatment types and can have sophisticated technology. The procurement of such technology potentially allows a more targeted and effective approach to treatment of the road network and an improved audit trail of where treatments have been undertaken.

It is often extremely difficult and inefficient to remove significant depths of snow using only salt and therefore consideration should be given to the use of snow ploughs mounted on spreaders or other suitable vehicles. Snow ploughs are durable, require little maintenance and should therefore prove very cost effective.

However, in urban areas there may be considerable difficulties in utilising snow ploughs and in this situation any consideration should be on a risk based approach.

It is also important to consider equipment requirements for dealing with footways and cycle routes. Specialist equipment, such as footway ploughs and footway salt spreaders may be necessary for this purpose.

The location of depots should be kept under review and specifically addressed when consideration is being given to procurement arrangements. It would be unlikely if all present depots from which authorities undertake Winter Services are ideally located, and significant financial and operational savings can often be achieved from re-location.

The environmental effects of highway maintenance depots and operations are dealt with in Section 15 of this Code, and these can be particularly significant in the case of the Winter Service, where operations will inevitably involve unusual hours of working. Every effort should be made to minimise the environmental intrusion of depots and so far as is practicable the effect of Winter Service operations.

A significant contribution to minimising environmental effects can be made by providing covered storage for all vehicles, equipment and materials, which can also reduce waste and maintenance problems.

Purchase and ownership of vehicles and equipment will also be a key issue for consideration in relation to the procurement of services. Private sector partners may be able to assist with financing arrangements and authorities will need to balance the financial advantages of this against the contractual and operational risks involved.

E1 Winter Service compounds and facilities

The Control room and vehicle storage depot is at Ashley Road Depot.

The grit store is also at Ashley Road Depot. It can hold around 1,500 tonnes of grit at full capacity.

E2 Calibration procedures

To be effective, grit/salt shall be spread evenly and at rates to suit prevailing conditions. Spreading shall be undertaken by automatic machines. The controls of spreading machines shall be calibrated and clearly marked for distinct rates of spread up to a maximum of 40 gms/m². Higher rates are unnecessary, wasteful and can be environmentally harmful. Care shall be taken to ensure that spread widths are neither too wide nor too narrow.

It is never recommended that salt be spread at a rate greater than 40 gms/m². It is further recommended that calibration testing of the spreaders would be of benefit each year together with precise instructions to the operators as to the settings needed to give the required rates of spread.

E3 Fleet inventory including licence requirements and capacity

TRANSPORT

The following transport and equipment is to be made available:

- Gritter/s - LGV
- Gritter/s - Non LGV
- Gritter/s - Demountable
- Caged Vehicles

The caged vehicles will be used for the delivery of grit to sub-depots and to support manual footpath gritting activities.

E4 Fuel stocks and locations

The drivers will be responsible to ensure vehicles have adequate fuel. There is a fuel facility at Ashley Road Depot. In the event of any breakdown of the fuel facility at the depot arrangements are in place for fuel to be drawn at public fuel stations.

E5 Location of plant, vehicles, snow-blowers and other equipment

A weekly report will be provided by the Contractor during the Winter period on the availability of vehicles, Any vehicle not available must be notified to the Authorised Client Officer. During a weather event when gritting operations are in progress, daily reports will be required.

Mechanical Shovel

A mechanical shovel or other mechanical loading equipment must be available at all times when gritting is in progress.

E6 Contingency arrangements

The need for extra vehicles plant and equipment during severe weather is unlikely to be able to be met without significant budgetary change as at such times suitable hired vehicles will be unlikely to be available. Keeping the existing fleet well maintained at all times is the responsibility of the Contractor.

If fuel is in short supply Haringey will have priority fuel deliveries and the use of this fuel will be restricted to the essential services like this.

E7 Garaging, servicing and maintenance arrangements**Use of Transport**

No vehicles will be allowed to stand loaded with grit for any length of time.

Washing of Vehicles and Plant

All vehicles used to transport salt should be thoroughly washed at the end of operations and where possible all moving parts should be greased. Gritting vehicles and plant are unloaded and thoroughly washed down whenever circumstances permit, ideally this would be done at the end of each working shift. This will be carried out under the instruction of the Contractor's Manager.

The Contractor's Transport Manager is to ensure that all spreading machines are ready for immediate use at all times, are mechanically sound and parked in readily accessible positions as from 1st October each year. The availability of parking spaces is to be checked by the Contractor's Manager and Contractor's Transport Manager.

When a spreading machine or a mechanical shovel is under repair and remains off the road for more than 1 hour during a Winter Service response event, the Contractor's Manager must inform the Authorised Client Officer as part of the daily report. If more than one gritting vehicle and/or demountable gritting unit is unavailable at any time, this must be communicated to the Authorised Client Officer by telephone with an estimate of the time when each will be ready for operational service again. The intention at all times is to have all gritting vehicles available for service.

Workshop

Duty mechanical fitters will also be placed on call.

E8 Contact and hire arrangements for contract plant.

Names of firms having mechanical shovels for hire, with a minimum bucket capacity of 1 cubic yard (0.7646 cubic metres) are to be listed and held by the Contractor's Transport Manager.

F SALT AND OTHER DE-ICING MATERIALS

Salt and De-icing Materials

Salt for de-icing

Rock salt is the prime material for dealing with ice and snow on roads but can have environmental consequences. It can adversely affect vegetation, pollute watercourses and leave a residue on footways. It can also damage the road structure, bridges and structures, utility apparatus and vehicles. However, used responsibly it can have minimal environmental impact. In the interests of sustainability therefore authorities should ensure that only the minimum of salt is used to deal with the prevailing conditions. Suggested rates of spread are given in Appendix H (of code of practice).

Appendix H (of code of practice) lists a number of alternative materials that authorities could consider using in place of rock salt in particular circumstances. The costs of some of these are extremely high and particular materials also have some environmental consequences. They may prove, however, to be cost effective in specific locations, such as the treatment of footways, where the need for additional sweeping can be avoided, and bridges, where the damage caused by the use of salt can be avoided.

As rock salt requires the passage of traffic to improve effectiveness, it may be necessary to use brine in some cases for example some cycle routes.

Salt management

Many authorities award salt supply contracts to a single supplier on a call-off basis. Contracts are often awarded on a balance of quality and price, with price usually being the driving consideration. This approach has resulted in a price driven market where salt supply is often treated as a commodity purchase.

Authorities carry the risk of being able to obtain the salt they require when they require it. Suppliers carry the risks involved in producing and stock piling salt before sale. Commodity purchase arrangements do not necessarily embrace the service relationships between authorities and their salt suppliers which should lead to improved reliability, and knowledge and anticipation through good communications, and which are facilitated by contemporary procurement arrangements.

Authorities and salt suppliers should treat the supply of salt as a service rather than a simple commodity purchase. **(Recommendation 16)**

It has become common to restock at intervals during the winter season using salt management systems based upon predicted use of salt and delivery times. The salt shortage in winter 2008/09 demonstrated that it is difficult for salt supply arrangements to accommodate significantly increased short term demand. Authorities should therefore ensure sufficient resilience in their salt stocks.

Authorities should develop close working relationships with salt suppliers and ensure that initial salt quantities and reorder triggers are set to achieve their local resilience standard.

It may not be easy for some authorities to achieve an appropriate level of resilience through storing salt at their own depots. Salt suppliers may be able to hold dedicated stock at locations around the UK and authorities should consider whether such an approach is possible.

Communications and relationships with salt suppliers may be improved by the development of supplier user groups and authorities should consider participation in such groups.

Salt storage

The correct storage of salt is essential to minimise environment damage and storage in salt barns helps to prevent leaching, eases handling, helps in maintaining low salt moisture content, and is strongly recommended where additives are used. Detailed advice is available on alternative types and construction methods available. Where open stockpiles are used these should be covered with sheeting, or spraying with bituminous emulsion which provide an effective alternative.

Both permanent and temporary salt storage areas should be sited and managed in accordance with requirements of the Local Planning Authority and the Environment Agency. In particular they should not be sited where they could cause damage to landscape or nature conservation or have the potential to pollute watercourses or groundwater. Authorities should be aware of the deterioration in the quality of salt stored for long periods and the need for effective stock rotation.

Where grit is used for treatment, for example in the more extreme conditions applying in Scotland, storage requirements may be less stringent and local advice should be sought.

As a means of enhancing local salt storage capacity, authorities and salt suppliers should jointly consider supplier owned salt stocks held on a short or long term basis in a number of widely distributed locations around the country. A joint approach may include agreements such as purchase of some or all stock by the end of a season or provision of land. **(Recommendation 17)**

Salt Procurement

Authorities should seek a broad approach to salt supply, for example establishing framework contracts with more than one supplier.
(Recommendation 18)

Authorities should consider whether efficiency benefits can be obtained from collaborative salt procurement and should also consider ways to improve the balance of risk between salt suppliers and themselves, e.g. longer contracts, performance contracts with minimum guaranteed purchase and supply, and contracts that include supply of salt and investment in facilities.
(Recommendation 19)

F1 Location and capacity of stocks for salt and other materials

GRIT STORAGE

The salt store is at Ashley Road Depot.

The Authorised Client Officer is responsible for the maintaining of sufficient stock of Grit/Salt. The maximum capacity of the salt stock at anyone time is 1500 Tonnes.

The contractor will supply the Authorised Client Officer with the quantities of materials used daily during weather events and at the 1st of each month from 1st November to 1st March each year. This information will be used by the Authorised Client Officer to determine whether an order for grit is required.

When grit is delivered the Contractor will make arrangements for facilitating unloading and piling of grit into the grit store.

Due to the grit currently being stored in the open it is rarely dry, all rates of spread quoted throughout this operational plan are for dry grit. It is rarely possible to use the wet grit at lower spread rates, although the introduction of specialist systems for pre-wetted salt do allow lower spread rates.

According to the Environment Agency's "Pollution Prevention Guidelines Highway Depots: PPG10" there is a risk of pollution of rivers and groundwaters, due to the run-off from salt (grit) stockpiles. They recommend that salt stores are roofed, or if this is not practicable, covered over with an impermeable membrane, situated on an impervious base and sited at least 10m away from the nearest watercourse or soakaway. Drainage from stores and loading areas should pass to the foul sewer (see Section 1b), or a sealed tank. Drainage from these areas should not pass to a watercourse or soakaway. If this is unavoidable, a consent will be required from the Agency, which would contain strict quality conditions in order to protect the water environment.

Measures should be taken to ensure that salt from the store is not allowed to encroach onto the open yard, using, for example, a ramp across the entrance. According to the designers the yard is designed to avoid such problems.

The Environment Agency's PPG 10 is available on their website at the following address:

<http://publications.environment-agency.gov.uk/pdf/PMHO0399BBUE-e-e.pdf>

Grit Delivery, Grit Bin management

The orders for restocking of the grit store is the responsibility of the Authorised Client Officer. However, the Contractor should notify the Authorised Client Officer in good time in order to ensure delivery well before the stock level falls close to the minimum stock level given in F3 below (600 tonnes).

The responsibility for ensuring grit/salt bins are filled lies with the Contractor. Prior to the start of each Winter Service Operational Period, the Contractor shall cleanse, maintain and refill all the Roadside Salt Bins. During the Winter Service Operational Period, the Contractor will refill empty grit bins and report damaged grit bins to the Authorised Client Officer who will make arrangements for replacement.

F2 Contacts and purchasing arrangements for supplies

Haringey Council is responsible for the purchasing of all grit supplies and the Authorised Client Officer is to ensure that arrangements are in place for the supply of top up grit supplies if required during the winter period. The Contractor's Manager will provide details of remaining grit stock as described above.

F3 Minimum pre-season and in-season stock levels

As a result of the problems with Salt supply during the winter of 2008-09 and 2009/10 Haringey Council has reviewed its minimum stock levels.

In order to ensure service resilience it is proposed that:

- Overall Winter Period - 1st November to 31st March
- Core Winter Period - 1st December to 1st March
- Days Resilience (Overall Winter Period) 3 days
- Days Resilience (Core Winter Period) 6 days

Treatment of the Priority 1 carriageway network requires about 25 tonnes per treatment. In order to have 6 days supply at 6 treatments per day a minimum stock holding of 900 tonnes through the core winter period is required.

F4 In season re-stocking arrangements

Haringey currently uses Cleveland Potash to procure salt. Cleveland Potash is one of two major suppliers in the UK, the other being Salt Union.

Haringey Council is in the fortunate position of having reasonable stocks of salt and will keep a reserve to enable adequate stock at all times during the core winter period to treat the resilience network for 6 days.

Other contingency arrangements include mutual aid with other Boroughs and with TfL.

If stocks were unable to be re-supplied by the normal supplier in the short term it will be difficult to have alternative procurement options. These will be looked at next season. However, in the meantime if the main suppliers have another significant problem this year, then Haringey will look at alternative suppliers.

In-season grit re-stocking will be undertaken to ensure that minimum stock levels each month during the winter season are as follows:

- 1st November, minimum of 1,500 tonnes;
- 1st December, minimum of 1,200 tonnes;
- 1st January, minimum of 900 tonnes;
- 1st February, minimum of 900 tonnes; and
- 1st March, minimum of 900 tonnes.

F5 Testing arrangements

The chemical composition of all salt (grit) should be stated by the supplier and tested (where necessary) in accordance with BS3247 Part 1. All grit should be transported in covered vehicles and have a moisture content not exceeding 1.5% by mass when delivered.

F6 Stock level monitoring and forecasting procedures

As stated previously Haringey Council is responsible for the purchasing of all salt supplies and the Authorised Client officer is to ensure that arrangements are in place for additional grit supplies during the winter period.

F7 Loading arrangements

All loading will normally be carried out at Ashley Road Depot.

Supervisors in charge of loading should note that to prevent overloading of vehicles it is suggested that each gritting vehicle should be loaded to the optimum level to be determined by the Contractor's Manager on duty at the time. A note should be kept of any problems occurring with clogging or gritting mechanisms. In these circumstances, loads should be varied downwards following discussions with by Drivers. This information must be recorded and reported to the Authorised Client Officer.

Details of loads, destinations, vehicle fleet numbers, etc. will be entered onto the record form (Appendix G) at the commencement of each journey.

In theory the amount of salt needed for Priority 1, 2 and 3 carriageway treatment is as follows:

Priority	Length (km)	Approximate tonnage of salt required
Priority 1	124	25 tonnes per single network spread
Priority 2	68	15 tonnes per single network spread
Priority 3	162	30 tonnes per single network spread

These tonnages assume a 7.5m wide spread width at 20 gms/m² and allows for some wider carriageways to have repeat gritting runs to ensure adequate coverage).

F8 Treatment requirements including spread rates.

Precautionary Gritting

As a general guide, the following spreading densities should be used as appropriate:

20 gms/m ²	Freezing conditions and light snow. For frost and light snow, precautionary gritting shall be carried out at a rate of 20gms/m ² according to temperatures and anticipated severity of snowfall.
20-40 gms/m ²	Dealing with snow up to 100mm deep, ice or hard packed snow. When freezing conditions are expected after rain, or where continuous snow is forecast, precautionary spreading rates shall be increased to 20-40 gms/m ² according to temperatures and anticipated severity of snowfall.

On roads not subject to heavy traffic and when sustained low temperatures below minus 5°C are encountered, the amount of grit needed to maintain a given melting effect must be increased by 15-20 gms/m² for each degree drop in temperature below this point. This will be determined by agreement with the Authorised Client Officer.

Treatment of Ice

If ice has formed on the road surface grit shall be spread at a rate of 40 gms/m² depending on the amount of ice to be removed and the air temperature. This should ensure rapid melting.

Treatment of Snow

The maximum salt spreading rate recommended for melting up to 40 mm of fresh snow at 0°C is 40 gms/m². Repeated applications of grit can remove a heavy accumulation of snow and this can be a useful method of operation in urban areas where conditions make the use of snow ploughs difficult and snow removal impracticable.

Treatment of Hard Packed Snow and Ice

If the above recommendations are followed hard-packed snow and ice should be rare. However, where these conditions form at temperatures down to minus 5°C

and where the hard packed snow and ice are more than 20 mm thick, removal is possible by using successive grit spreads at 20-40 gms/m². At temperatures below minus 5°C and where the hard packed snow or ice are more than 20 mm thick, the use of salt alone will result in an uneven and slippery surface.

In those exceptional circumstances a single-sized abrasive aggregate of particle size 0.6-1 cm, or a 0.5 mm sand having a low fine content can be added to the salt.

Reversion to salt (grit) only shall be made as soon as possible since abrasives contribute little to the removal of the snow and ice and may block drains and gullies on thawing.

Use of Salt/Sand and Ballast

In normal gritting operations it would be expected that only salt (grit) would be used

Fine aggregates will only be used in exceptionally severe weather and if considered to be worthwhile or necessary.

Care must be taken that salt is not spread needlessly, or wastefully, any lumps must be broken up.

In the event of mechanical grit spreading machines not being available, the spreading of grit, sand or ballast on the highway will be carried out by staff by means of hand shovels.

In any event, this should only be on the instruction of the Contractor's nominated Winter Service operation manager. Employees sent out to spread salt, sand or ballast must be reminded that care must be taken to ensure that it is not thrown onto pedestrians or vehicles.

Care must be taken to ensure that grit is not thrown onto grass and flower beds. Where practicable, grit must not be applied within 6 feet of a young tree.

G OPERATIONAL COMMUNICATIONS

G1 Technical systems information

There are no computerised systems involved in the present plan, and therefore all communications are carried out either by landline or mobile phone, or in person. All written communications are e-mailed and if urgent confirmed by phone.

G2 Reporting arrangements and protocols;

Daily Report

At the end of each day the following information should be passed to the Authorised Client Officer;

- work carried out;
- tonnage of grit used; and
- staff and equipment deployed.

Refuse Collection

Normal service must be provided at all times but any sites where access cannot be gained due to ice must be reported to the Authorise dClient Officer on a daily basis. Where the service cannot be maintained crews shall assist in gritting of footways, normally in their work area.

PROCEDURE AFTER GRITTING

A debriefing meeting is to be held at which a written report from the Contractor’s Manager to Contractor’s General Manager giving details of major activities with comments on working procedures and any possible improvements. These will be reviewed as part of the monthly Contract Liaison meetings and the annual review of the service.

G3 Inventory and allocation, including back up.

Copies of all forms are kept at both the Client Office and at the Contractor’s Control room. This provides a back up in the event of flood, fire or other serious problem. As e-mail becomes a more common method of communication it is important that these are printed out or stored at the offices for both.

H CONTINGENCY PLAN

H1 Contingency arrangements for Winter Service delivery such as salt supply, drivers, fuel vehicles etc;

Authorities should prepare contingency Winter Service Plans for severe weather conditions which include possibilities such as salting a Minimum Winter Network.

Authorities should seek agreement on plans in advance with other highway authorities and key public services such as hospitals and public transport providers. There should be a co-ordinated approach to implementing Minimum Winter Networks across adjacent highway authorities.

As part of their contingency planning, authorities should define a Minimum Winter Network. This may be a subset of their normal treatment network and should provide a minimum essential service to the public, including links to the strategic network, access to key facilities and other transport needs.

It is important that Minimum Winter Networks ensure continuity across boundaries. It is recognised that authorities will have difficulty in treating all bus routes as part of their minimum network. Minimum Winter Networks

should however enable bus operators to run minimum services, as appropriate.

Mutual aid between authorities is often used in the response to "wide" area emergencies, as the impact on the local authorities, emergency services and other resources can be overwhelmed. Sharing, e.g. depots and salt stocks, through mutual aid may be helpful. Where planning to do so authorities should make contingency arrangements in advance.

Mutual aid can be an informal or formal process having written agreements. Arrangements are usually between organisations that work closely together on a regular basis or as part of local resilience forums. Both approaches work well if they are flexible enough to change in response to the dynamics of a situation.

Authorities should explore the potential for mutual aid in salt supply and other aspects of Winter Service and should make contingency arrangements in advance.

With the experience of the last 2 winters and the extreme shortage of grit nationwide the need for an escalation process and emergency operating procedure has been included in Section D15 and Appendix A.

This should not be seen to be just for grit but for any shortage of resource. A serious pandemic affecting drivers, a fuel shortage or another reason altogether could lead to a similar need for escalation.

H2 Arrangements for implementing minimum winter networks;

The implementation of the minimum winter network (Resilience Network) will probably be based on a regional or national decision due to the importance of clear and consistent communication to the media, public transport providers, emergency services and the public. Alternatively, the decision to resort to the Resilience Network locally could be taken by the Council's Risk and Emergency Planning Steering Group in response to extreme difficulties of a localised nature.

H3 Mutual Aid e.g. resources available from adjacent authorities;

The opportunity for mutual aid was tested over the last 2 winters. In the Local Government Association's publication "Weathering the storm II - Improving UK resilience to severe winter weather" published in July 2010 it states:

Mutual aid between councils and between councils and the Highways Agency played an important part in ensuring that no area ran out of salt. For those areas with some available stocks, willingness to enter into mutual aid was tempered by uncertainty about when they might receive further supplies themselves, particularly, as happened in a number of cases, when promised deliveries failed to materialise when expected due to logistical issues with the suppliers. In addition, councils were keen to ensure that all possible measures

to reduce salt usage and conserve stocks were in place in areas applying for mutual aid before making stocks available.

A number of areas are now seeking to put in place frameworks for mutual aid with surrounding authorities which include agreements on 2 ADEPT is the Association of Directors of Environment, Planning and Transport, formerly known as CSS conservation of stocks in times of supply shortages. Councils have suggested that this be incorporated into the Well-maintained Highways Code of Practice to encourage all areas to put similar arrangements in place.

In London the London Local Authority Co-ordination Centre (LLACC) has acted as a co-ordinator of mutual aid but the need for consistency in grit supply conservation and in the definition of the Resilience Network are seen as key to Authorities agreeing to this in the future. The issue of certainty of re-stocking of grit is also well recognised. All London local authorities are currently signing a Memorandum of Understanding, agreeing to provide mutual aid to one another during an emergency. Under this arrangement, Council is able to approach any other borough for mutual aid, in the event that the LLACC is not providing London-wide coordination.

H4 Liaison with Category 1 and Category 2 responders (reference Civil Contingencies Act 2004).

Although not everyone in Winter Service provision is aware of the Category 1 and 2 responders as referred to in the Civil Contingencies Act 2004, their understanding has increased no end over the past two winters.

In terms of the respective functions, Category 1 and 2 responders in London are no different to those in other parts of the country. However, London has particular patterns of public service provision and government which mean that some aspects of civil protection have to be organised differently. As well as being a region, London is also the capital city, with the effects of any incident felt right across the UK.

Part 1 of the Civil Contingencies Act 2004 establishes a clear set of roles and responsibilities for those organisations involved in emergency preparation and response at the local level. The Act divides local responders into two categories, imposing a different set of duties on each.

Category One organisations are those at the core of the response, such as blue light emergency services, local authorities, NHS and other health bodies. These organisations are subject to the full set of civil protection duties including risk assessment, development of emergency plans, the establishment of Business Continuity arrangements, the warning and informing of the public, sharing of information with other agencies to improve the response and multi-agency co-operation. Local Authorities are additionally required to provide advice to businesses and voluntary organisations about business continuity management.

Category One Responders in Haringey meet at the Haringey Emergency Planning Partnership meetings every three months. These meetings provide an opportunity to review local arrangements for winter resilience.

Category Two organisations are co-operating bodies which are less likely to be involved in the heart of planning work but will be heavily involved in incidents that affect their sector. Category Two responders have a lesser set of duties which involve co-operating and sharing relevant information with other Category One and Two responders. Category Two organisations include transport, utility and other private sector companies among others

London Local Authority Gold Operating Procedures

The London Fire Brigade – Emergency Planning owns, on behalf of all the London Boroughs, the London Local Authority Gold Operating Procedures. The function of the Local Authority Gold is to manage the collective response of London's local authorities to an incident requiring the opening of the Strategic Co-ordination Centre. This function is supported by a resolution passed by each London Borough and the Common Council of the City of London which delegates powers to Chief Executives to incur expenditure and deploy resources on behalf of one-another. The co-ordination of London's 33 local authorities will be directed by Local Authority Gold through the London Local Authority Co-ordination Centre (LLACC), also provided by the London Fire Brigade.

This well-established London Local Authority Gold (LLAG) is supported by the London Local Authority Coordination Centre (LLACC) which is in a position to liaise at a tactical level with TfL and other relevant agencies to share information and, where necessary, to assist in coordinating activity.

The procedures outlined in section D15 and in Appendix A2 take into account the probable involvement of the LLACC in any London wide event and co-ordination between the various parties.

I INFORMATION AND PUBLICITY

Communications - Information for the Public

Authorities should ensure effective communication of information for the public before and during both normal and severe winter conditions.
(Recommendation 6)

Authorities should make widely available for users and the community a nontechnical summary of the Winter Service Plan, including plans of the treated network, together with guidance on safe use of the network. They should also establish arrangements for local radio and web based information.

Section 6 of this Code deals with arrangements for community involvement in highway maintenance and the importance of information and publicity. This provides opportunities and challenges, which should be positively addressed

by authorities and provide an important opportunity to demonstrate understanding of users' needs, and a strong service commitment.

It is of crucial importance that policies and standards of Winter Service provided by authorities are widely available and understood by users and the community.

As far as possible highway users should be made familiar with treatment routes, particularly in severe weather conditions. This will help in ensuring that expectations are realistic and consistent with the resources available as well as maintaining public safety.

Many authorities provide leaflets summarising policies and service standards, including maps showing routes treated, contact information and advice on safe network use. The leaflets should be reviewed annually and made available through the internet, libraries, information centres, schools and a wide range of outlets. Further details on the content and use of leaflets are included in Appendix H (of code of practice).

Authorities should establish effective working arrangements with local press and broadcast media to enable the presentation of timely and accurate information and advice on network condition and use, including travel information, network availability and risk of severe conditions such as snow and black ice. This is especially important during prolonged cold weather and is likely to involve television, radio and the internet. Local radio in particular considers this to be a most important aspect of their service to the community and it therefore provides the opportunity to build good working relationships over wider issues. Many authorities have specialist press and public relations personnel and it will be important to clarify and agree respective service and specialist responsibilities.

It is important to define and agree key contacts with press and broadcast media and also establish a clear understanding of the most effective timings for information to be provided, in order to reach necessary audiences and broadcast schedules. It may be helpful to arrange joint workshops or training sessions to build understandings and relationships.

There may also be a need in more widespread and extreme conditions to provide information to the public using national press and broadcast. This may be undertaken either directly or by arrangement with local media, and arrangements should be discussed with them. It may also be possible to utilise variable message signs.

Communications - Information for other services

Authorities should ensure that there is appropriate consultation and communication with other highway authorities, key public services and other stakeholders to ensure improved service for the public. **(Recommendation 7)**

It is important to provide information directly to key stakeholders, including adjacent highway authorities, all emergency services, public transport operators, motoring organisations, the education authority, schools, their bus operators, and key local organisations. This information could include:

- Sharing Winter Service Plans;
- A non-technical summary of the Winter Service Plan;
- Maps of treatment routes;
- Operational decisions on a timely basis.

11 Local press and broadcast contact information

All enquiries from the media must be referred to the Council Communications Team in all circumstance; telephone number 020 8489 2901.

12 Public information leaflets

The Council will publish on their internet site a copy of this plan (with confidential contact numbers removed) as well as route maps and other information. Advice will also be provided on the web-site about precautions that people should take during snow and ice weather conditions. Currently, due to the number of different transport users travelling from, to and through the Borough, and each Borough having different information there is not currently seen to be a benefit in producing a separate printed leaflet.

The Executive Summary of this plan is seen to be a non technical summary of the plan.

13 Other key local and national contact information

The following contact numbers are given to enable contact with the neighbouring authorities and Transport for London when the situation requires. These are the general numbers and it is advisable to get actual contact names and numbers for the respective Control Officers. These numbers would not be published in this plan but in a confidential Appendix.

Hackney

Contact numbers to follow

www.hackney.gov.uk

Islington

Contact numbers to follow

www.islington.gov.uk

Enfield

Contact numbers to follow

www.enfield.gov.uk

Barnet

Contact numbers to follow

www.barnet.gov.uk

Waltham Forest

Contact numbers to follow

www.walthamforest.gov.uk

Camden www.camden.gov.uk
 Contact numbers to follow

Transport for London (TfL) www.tfl.gov.uk
 Contact numbers to follow
 020 7941 2011 (8.30 to 18.00 Mon – Fri) otherwise 020 7343 5000

14 Thermal mapping

Haringey currently has not had any thermal mapping done and having talked with other Council's about the benefits of doing so has realised that the technology has now moved on. The possibility of route based forecasts may be considered once the technology is more proven.

15 Responsibilities and guidance for providing information;

It is important that correct information is always given to the public. However it is difficult for the operations to continue smoothly if constantly interrupted by the public phoning for information. Therefore regular operations bulletins will be provided to the Haringey Enterprise Call Centre and the Haringey's Call Centre to give updates to callers. The Haringey web-site will also be updated regularly during snow events giving information about how the Council is responding to the weather.

Contact Haringey:	Normal Office hours	- 020 8489 1000
	Outside normal office hours	- 020 8348 3148*
Enterprise Call Centre:	Normal Office hours	- 020 8885 7700
	Outside normal office hours	- not applicable*

*Note that Enterprise does not operate an outside normal hours Call Centre facility. Any calls outside normal office hours should be directed to the Contact Haringey outside normal officer hours number. Winter Service complaints and service requests that are called through to the Contact Haringey Outside normal office hours number will be passed to staff on cover at Enterprise to deal with.

16 The decision making process

The decision making process will be based on the Decision Matrix Guide from the Code of Practice this is reproduced in Appendix A for use by the Authorised Client Officer and the Contractor's Manager.

17 Road weather stations

Haringey has no road weather stations at present.

I8 Information to be provided

The forms in Appendices E; F; G and H will be used to record the decision making process (or as many as are necessary for that particular occasion) and to communicate the information to others as required. If changes or alterations are to be made to these then the Client Officer and the Contractor's nominated Winter Service operation manager will agree the changes and revise them accordingly.

I9 Road weather information bureau service

See section C2.

I10 Timing and circulation of information;

The Daily Log, see Appendix E, will be completed every day by the Contractor's Manager for every day between 1st November 2010 and 31st March 2011. This will be done as soon as possible after the weather forecast is provided and the first record made by no later than 14.30 hours each day. If the forecast does not require a response no further action need be taken.

I11 Road weather forecast

See Section C5.

I12 Notification arrangements for failure to maintain the published network

It is recognised that there will be times when it is not possible to maintain the published network. This would normally be due to exceptional circumstances that have led to a planned reduction in activity leaving only the Resilience Network receiving treatment.

Any such planned reduction in network coverage (even if implemented rapidly) will be communicated to others as quickly as possible. The people who receive daily e-mails of planned service provision (key stakeholders and neighbouring authorities) will be told by that e-mail.

The general public will be informed as quickly as possible by means of press releases and website information as well as the call centre being informed so that anyone phoning to enquire can be informed.

I13 Reporting procedure

Appendix E will be completed every day by the Competent Supervisor for every day between 1st November 2010 – 31st March 2011. If the forecast is NIL no further action need be taken.

Appendix F will be completed by the Competent Supervisor every day that there is a forecast other than "NIL" If there is any doubt then a "Decision Justification"

log sheet will be completed. This will be faxed or e-mailed to the Contractor's nominated Winter Service operation manager and the Authorised Client Officer as soon as possible after the decision is made. If further work is required a "Decision to Grit" sheet will be completed as well and sent by fax or e-mail to the Contractor's nominated Winter Service operation manager at the same time as the "Decision Justification" log. This will then be completed by the Contractor's nominated Winter Service operation manager.

Appendix G will be completed by the Contractor's nominated Winter Service operation manager whenever precautionary salting is instructed. After completion a copy will be faxed or e-mailed to the Authorised Client Officer.

Appendix H will be completed by the Contractor's nominated Winter Service operation manager whenever follow-up salting is instructed. After completion a copy will be faxed or e-mailed to the Authorised Client Officer.

I14 Maintenance of ice detection equipment.

Haringey does not have any ice detection equipment so does not have a maintenance requirement at present.

J QUALITY MANAGEMENT

J1 Quality management regime;

In general, control of the Gritting of all Borough highways including all bus routes will be at the discretion of the competent Supervisor from the Contractor except in severe weather conditions when the Authorised Officer may suspend normal operations.

Some scheduled contract work (Street Sweeping) will be suspended as soon as a severe frost/snow warning is received from the Authorised Officer. This action will allow the manoeuvring and loading of the gritting fleet with minimum disruption to the service. A smooth start and quick build up to full strength is essential for the rapid response required to grit/salt Priority 1 roads in the initial stages of snow fall or heavy frost.

Winter Service operations will be controlled from the control room located at Ashley Road Depot.

Transport for London Road Networks (Red Routes)

Transport for London (TfL) is responsible for the Winter Service of Red Routes.

All enquiries concerning these roads should be addressed to TfL's agents. Telephone number 0845 305 1234

J2 Document control procedures

The documents to be sent out under the circulation list (see section B3) are all to be treated as uncontrolled copies. Revisions will only be circulated during the

course of the year to those on the restricted circulation list, and it is for each officer to maintain their copy as the latest version. There will be an annual review and the full circulation list should be reviewed and revised (if necessary) each year. Those who are on the revised list will receive the next year's document.

J3 Distribution of documents

A circulation list is given in Appendix I.

J4 Information recording and analysis;

Information Recording and Monitoring

Authorities should continually monitor performance during service delivery and respond effectively to changing conditions or network incidents.
(Recommendation 13)

Comprehensive and accurate records should be kept of the all Winter Service activity, including timing and nature of all decisions, the information on which they were based, and the nature and timing of all treatment. Note that time taken running dead mileage at end of salting run is not included in treatment time. It is preferable to record both the time at the end of actual salting and the time of return to depot.

Authorities should make use wherever possible of electronic vehicle location systems together with automatic recording of salt spreading. This will simplify and improve the accuracy of records as well as provide corroboration of service delivery in cases where failure to salt is alleged.

Daily Report

The Contractor's Competent supervisor will complete daily the Daily Log (Appendix E) and whenever the Weather Forecast is other than "Nil" the Daily Decision Justification Log (Appendix F).

If gritting is to be carried out then the "Decision to Grit" form (also Appendix F) should also be used. The Contractor's nominated Winter Service operation manager will fill in the vehicle availability and personnel as a report back.

The Contractor's supervisor will also record the precautionary salting and any further work on the Winter Service Record (Appendix G) and Winter Service Record Additional Sheet (Appendix H) and will fax or e-mail these at the end of shift to the Client Controller.

At the end of each day the following information should be passed to the Authorised Officer;

- daily work carried out;
- tonnage of grit used; and

- staff and equipment deployed.

J5 Arrangements for performance monitoring, audit and updating

ANNUAL REVIEW

All aspects of the Winter Service Plan, including service delivery arrangements, should be reviewed annually in consultation with key stakeholders to take account of changing circumstances. **(Recommendation 20)**

All vehicles, plant, fuel provision, equipment and maintenance arrangements should be checked annually and in accordance with manufacturers' requirements to ensure that any necessary action can be taken to ensure full operational service status prior to the Winter Service season. This should include checking the calibration of all de-icing equipment and spreaders.

Authorities should review the administrative and management arrangements for Winter Service annually. This should include the role of the private sector in delivering highway services, and the use of support services such as refuse collection, street cleansing and grounds maintenance services.

As part of the Annual Review authorities should consult with bus operators regarding changes to routes. In doing so and where practicable bus operators should be encouraged not to change routes through out the winter season where there would be an effect on treatment routes.

The Annual Review should include an analysis on whether service delivery meets the Winter Service policy and plan. It should also include a review of the current thinking with regards to the impact of climate change. Service efficiency improvements such as route optimisation should also be considered.

The performance will be monitored as per the current contract.

New performance monitoring targets for the winter of 2011/12 onwards are being discussed as part of the competitive dialogue process.

J6 Procedure for deviation from the Winter Service Plan.

The need to deviate from the Winter Service Operation Plan on occasions is understood in order to help specific needs by the Emergency Services or other Authorities or for other reasons.

The Authorised Client Officer or his deputy can decide to deviate from the plan but must record the event and his reasons for so doing. Any regular deviations necessary will be reviewed at the end of the season to see whether there is good reason to amend the Winter Service Operational Plan for future years.

If necessary changes in season to the Winter Service Operational Plan (e.g. addition of new roads onto routes) can be made but all such changes must be notified to those the plan was formally issued to.

APPENDIX A – DECISION MAKING PROCESS**WINTER SERVICE – GRITTING****PROCEDURE NOTES FOR CLIENT OFFICERS**

As it is anticipated that this may be copied and used on its own, it is important that this is read in conjunction with the full Winter Service Operational Plan

Table H2 - Sample Decision Matrix Guide				
Road Surface Temperature	Precipitation	Predicted Road Conditions		
		Wet	Wet Patches	Dry
May fall below 1°C	No rain No hoar frost No fog	Salt before frost	Salt before frost (see note a)	No action likely, monitor weather (see note a)
Expected to fall below 1°C	No rain No hoar frost No fog	Salt before frost	Salt before frost (see note b)	
	Expected hoar frost Expected fog		Salt before frost (see note b)	
	Expected rain BEFORE freezing	Salt after rain stops (see note c)		
	Expected rain DURING freezing	Salt before frost, as required during rain and after rain stops (see note d)		
	Possible rain Possible hoar frost Possible fog	Salt before frost		Monitor weather conditions
Expected snow	Salt before snow fall			
The decision to undertake precautionary treatments should be, if appropriate, adjusted to take account of residual salt or surface moisture. All decisions should be evidence based, recorded and require continuous monitoring and review.				

Notes:

- (a) Particular attention should be given to the possibility of water running across carriageways and other running surfaces e.g. off adjacent fields after heavy rains, washing off salt previously deposited. Such locations

should be closely monitored and may require treating in the evening and morning and possible other occasions. When a weather warning contains reference to expected hoarfrost, considerable deposits of frost are likely to occur. Hoarfrost usually occurs in the early morning and is difficult to cater for because of the probability that any salt deposited on a dry road too soon before its onset, may be dispersed before it can become effective.

- (b) Close monitoring is required under this forecast condition which should ideally be treated just as the hoarfrost is forming. Such action is usually not practicable and salt may have to be deposited on a dry road prior to and as close as possible to the expected time of the condition. Hoarfrost may be forecast at other times in which case the timing of salting operations should be adjusted accordingly.
- (c) If, under these conditions, rain has not ceased by early morning, crews should be called out and action initiated as rain ceases.
- (d) Under these circumstances rain will freeze on contact with running surfaces and full pre-treatment should be provided even on dry roads. This is a most serious condition and should be monitored closely and continuously throughout the danger period.
- (e) Weather warnings are often qualified by altitudes in which case differing action may be required from each depot.
- (f) Where there is any hint of moisture being present, a pessimistic view of the forecast should be taken when considering treatment to negatively textured surfaces.

Target rates of spread

The following minimum spread rates of un-modified salt are suggested for different operational scenarios and are illustrated in Table H3.

Different rates of spread may be appropriate for pre-wetted or modified salt and these should be established based on documented evidence.

Pre-Treatment Salting

Salt stored under cover -10g/m²;

Salt stored in the open -15g to 20g/m².

Post-Treatment Salting (For all methods of storage)

Prior to snowfall, or rain followed by rapid freezing, dependent on conditions - 20g to 40g/m²;

Snow in place, depth over 30mm - ploughing and salting up to 40g/m².

Hard Packed Snow and Ice

Air temperature above minus 8°C - successive salting at 20g to 40g/m²;

Air temperature below minus 8°C - gritting with salt/single size abrasive aggregate not exceeding 6mm or 5mm sharp sand.

Table H3 - Sample Treatment Matrix Guide For Dry Unmodified Salt			
Weather Conditions Road Surface Conditions Road Surface Temperature (RST)	Treatment		
	Air Temperature	Salting (g/m²)	Ploughing
Frost or forecast frost RST at or above - 2°C		10	No
Frost or forecast frost RST below - 2°C and above - 5°C		20	No
Frost or forecast frost RST at or below - 5°C and above - 10°C and dry or damp road conditions		20	No
Frost or forecast frost RST at or below - 5°C and above - 10°C and wet road conditions (existing or anticipated)		2x20	No
Light snow forecast (<10mm)		20	No
Medium/heavy snow or freezing rain forecast		2x20	No
Ice formed	Above - 5°C	20	No
Ice formed	at or below - 5°C	2x20	No
Snow covering exceeding 30mm		20-40 (successive)	Yes
Hard packed snow/ice	Above - 8°C	20-40 (successive)	No
Hard packed snow/ice	at or below - 8°C	salt/abrasive (successive)	No

Notes:

- (a) Rate of spread for precautionary treatments may be adjusted to take account of variations occurring along the route such as residual salt, temperature variations, surface moisture (in the air or on the road surface) road alignment and traffic density.
- (b) All decisions should be evidence based, recorded and require continuous monitoring and review.
- (c) Ice refers to all ice on the road surface, including black ice.