

APPENDIX 1
WINTER SERVICE PLAN CABINET REPORT 4.10.11
WINTER SERVICE PLAN 2011/12

LONDON BOROUGH OF HARINGEY

WINTER SERVICE

**OPERATIONAL PLAN
2011 – 2012
DRAFT**

**SINGLE FRONTLINE SERVICE
Place & Sustainability Directorate**



Haringey Council

LONDON BOROUGH OF HARINGEY

SINGLE FRONTLINE SERVICE Place And Sustainability Directorate

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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 2011/12.

Responsibility for the provision of the Winter Service Operational Plan resides within the Directorate of Place and Sustainability, Single Frontline Services Business Unit, 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. Further advice was issued as a result of the even more severe winter weather in 2009/2010, for example in relation to salt spread rates and definitions of routes to be included on resilience networks and this plan has been amended to account for this.

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 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 2011/12 the contractor is Veolia Environmental Services. The Veolia company website is:

<http://www.veoliaenvironmentalservices.co.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 (TBC). 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

For the winter of 2011/12 the network of grit bins has been increased from 150 to 153 grit bins. 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.

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 hold stocks of salt of at least the following levels through the winter season:

- 1st November, review stock, minimum of 1,500 tonnes required;
- 15th November, review stock, minimum of 1,350 tonnes required;

- 1st December, review stock, minimum of 1,500 tonnes required;
- 15th December, review stock, minimum of 1,350 tonnes required;

- 1st January, review stock, minimum of 1,500 tonnes required;
- 15th January, review stock, minimum of 1,350 tonnes required;

- 1st February, review stock, minimum of 1,200 tonnes required;
- 15th February, review stock, minimum of 900 tonnes required;

- 1st March, review stock, minimum of 900 tonnes required.

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 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 cycles 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	Treated on	Treated on forecast	Treated during or after
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Route/Priority	forecast of frost?	of snow?	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 and salt stock levels allow)
3	No	No	Yes but unlikely and only if P1/P1A/2 are complete and salt stock levels allow)

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 likely to only be partial and only if P1/P1B/P2 are complete and salt stock levels allow)
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 150 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 4 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 4 sites where consideration is being given to the installation of more grit bins ready for the winter of 2011/12.

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 maintain the following minimum grit stock levels through the winter season;

- 1st November, review stock, minimum of 1,500 tonnes required;
- 15th November, review stock, minimum of 1,350 tonnes required;

- 1st December, review stock, minimum of 1,500 tonnes required;
- 15th December, review stock, minimum of 1,350 tonnes required;

- 1st January, review stock, minimum of 1,500 tonnes required;
- 15th January, review stock, minimum of 1,350 tonnes required;

- 1st February, review stock, minimum of 1,200 tonnes required;
- 15th February, review stock, minimum of 900 tonnes required;

- 1st March, review stock, minimum of 900 tonnes required.

If minimum required stock levels required are not met, orders are to be placed to replenish the stock to the minimum stock level. On or around the 7th and 22nd of each month the stock levels are to be reviewed alongside the short term (5 day) and medium term (15 day) weather forecasts to determine whether minimum stock levels are at risk of not being maintained

due to the possibility of severe weather. In the event that severe weather has been forecast a decision may be taken to place orders for salt stock replenishment even though salt stock levels may be above the required minimums.

The minimum stock level of 900 tonnes is in compliance with the Council's commitment to meet the minimum standard laid down in the original UK Road Liaison Group's (UKRLG) recommendation, which provides enough grit to be stored to treat the whole of the Carriageway Priority 1 network 6 times in 6 days, a total of 36 runs.

A higher minimum resilience level has been recommended in 'The Resilience of England's Transport Systems – An Independent Review, July 2010', a review commissioned by the DfT and undertaken by David Quarmby. This review recommends minimum resilience levels should be equivalent to 48 treatments of the Carriageway Priority 1 network, equivalent to a minimum stock of 1,200 tonnes. The revised minimum required grit stocks detailed above provide for this more demanding level of resilience to be met through until 1st February. This should prove sufficient to meet the demand for gritting through the core winter service period whilst allowing a tolerable reduction to a minimum of 900 tonnes at the end of the winter season.

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 happened in the 2 winters before last. 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 for provision of adequate grit supplies was passed to Veolia at the start of the new Waste and Environmental Services Contract in April 2011. The Client remains responsible for the appointment and monitoring of a contractor to carry out the salting operations, for 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 salting operations to deal with ice and snow.

The contractor is responsible for the provision of the appropriate equipment and necessary resources to apply salt 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
Salt Purchase	The Contractor
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
Salt Bin removal/replacement/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 the decision making process please refer to Appendix A.

It is generally necessary for routes to be gritted in a numerical order. However, from this winter the following roads will receive fast-track treatment in recognition of their particular risk level and weight of traffic;

- Muswell Hill
- Crouch Hill
- Crouch End Hill
- Ferme Park Road
- Alexandra Palace Way

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 Single Frontline 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 Veolia 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 Single Frontline 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 2011 and full standby arrangements will be in place until 31st March 2012

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 2011 though to 30th April 2012

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 and 2010/11 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 341 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 127 kms 5s 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 gritting of a network of road totalling 23 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 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 1A 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 67 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

The list of Priority 3 carriageways provides for gritting of a network of carriageways totalling 146 kms. 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 Resilience carriageways provides for gritting of a network of carriageways totalling 91 kms. 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, (TBC) 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 20 g/m² per treatment.
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. 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.
5. 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.
6. 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

There are no absolute target response times for completion of pre-cautionary, pre and post gritting. However, it is expected that on the forecast of frost requiring pre-cautionary gritting, the Carriageway Frost Patrol gritting schedule will be completed before frost sets in. Upon the forecast of snow requiring pre-gritting of roads it is expected the Carriageway Priority 1 gritting schedule will be completed before the time forecast for snow to begin to fall. Where possible gritting on Carriageway Priority 1A (schools) should have commenced by the time snow begins to fall. Performance against these standards will be monitored.

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 forecast, 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, this is called the Pavement Frost Patrol.

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

There are no absolute target response times for completion of pre-cautionary, pre and post gritting. However, it is expected that on the forecast of frost requiring pre-cautionary gritting, the Pavement Frost Patrol gritting schedule will be completed before frost sets in. Upon the forecast of snow requiring pre-gritting it is expected that all Pavement Priority 1 gritting schedules will be completed before the time forecast for snow to begin to fall. Where possible gritting on Pavement Priority 1B and Pavement Priority 2 (schools) should have commenced by the time snow begins to fall. Performance against these standards will be monitored.

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 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 150 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 4 locations in response to feedback from residents and Members following the severe winter of 2010/11.

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 Single Frontline Service will assist in preparations for winter at these locations - including provision of grit and grit bins Assistance will be provided during the winter season but it is unlikely that the Single Frontline Service will be in a position to provide a swift response during a severe weather event as its own resources will be focussed on the Winter Service for the public highway.

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, features or events (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.

When snow is expected to fall, is falling or is laying on the ground during the 2 days prior to a Spurs home game, this could cause hazardous driving and walking conditions for supporters, especially on surfaces that would ordinarily not have been gritted as Priority 1 carriageways or pavements. In such circumstances consultation will take place with the Cabinet Member, the Borough Engineer and the Police to determine whether gritting will take place to support the event. The decision to do so will take into account weather forecasts, salt supply levels and Police advice.

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. Veolia currently use Meteogroup. (TBC)

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.

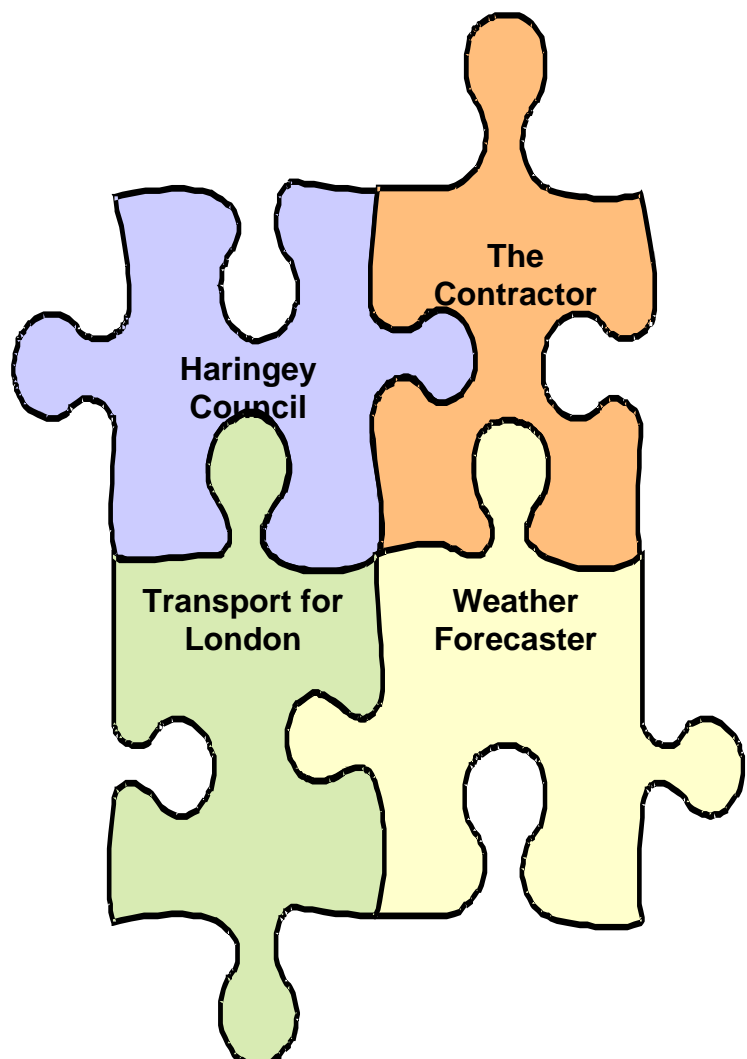
In rural areas, authorities should examine the potential for using local council snow wardens, who may have an effective role in gathering information and providing Winter Service Managers with details of specific local problems. If snow warden schemes are adopted clear terms of reference should be established.

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.

There is training available from City and Guilds and there is also some guidance for Supervisors contained in their Winter Service Operations (6159-01) Supervisor guidance which is available for free download on line at:

http://www.cityandguilds.com/documents/ind_construction_utilities/6159-01_h-book_sup.pdf

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 3 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 and 15th of each month from 1st November to 15th March each year. This information will be used by the Authorised Client Officer to determine whether an order for grit is required of the contractor.

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

Under the new Waste and Environmental Services contract, Veolia is responsible for orders of grit, for taking grit bins off the street for the period outside the winter season and for filling and re-filling of grit bins through the winter service season. The Contractor will notify the Authorised Client Officer of estimated grit stock levels throughout the winter service period in order that monitoring of the required minimum stock levels takes place.

The responsibility for ensuring grit/salt bins are filled lies with the Contractor. At the end of each winter service season the Contractor will remove grit bins from the street for cleansing and maintenance to be undertaken. Prior to the start of each Winter Service Operational Period, the Contractor shall re-install grit bins and fill all the grit bins. During the Winter Service Operational Period, the Contractor will refill empty grit bins. The Contractor will be responsible for replacement of damaged and missing grit bins.

F2 Contacts and purchasing arrangements for supplies

Veolia 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) 6 days
- Days Resilience (Core Winter Period) 8 days

Treatment of the Priority 1 carriageway network requires about 25 tonnes per treatment. In order to have 8 days supply at 6 treatments per day a minimum stock holding of 1,200 tonnes through the core winter period is required.

F4 In season re-stocking arrangements

Veolia is now responsible for procuring salt. Haringey Council has a salt store large enough to fulfil minimum salt stock requirements to be able to comply with the higher resilience standards.

In-season re-stocking arrangements will be as follows:

- 1st November, review stock, minimum of 1,500 tonnes required;
- 15th November, review stock, minimum of 1,350 tonnes required;

- 1st December, review stock, minimum of 1,500 tonnes required;
- 15th December, review stock, minimum of 1,350 tonnes required;

- 1st January, review stock, minimum of 1,500 tonnes required;
- 15th January, review stock, minimum of 1,350 tonnes required

- 1st February, review stock, minimum of 1,200 tonnes required;
- 15th February, review stock, minimum of 900 tonnes required;

- 1st March, review stock, minimum of 900 tonnes required.

If minimum required stock levels required are not met, orders are to be placed to replenish the stock to the minimum stock level. On or around the 7th and 22nd of each month the stock levels are to be reviewed alongside the short term (5 day) and medium term (15 day) weather forecasts to determine whether minimum stock levels are at risk of not being maintained due to the possibility of severe weather. In the event that severe weather has been forecast a decision may be taken to place orders for salt stock replenishment even though salt stock levels may be above the required minimums.

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

This is already explained elsewhere in this plan.

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	127	25 tonnes per single network spread
Priority 2	67	15 tonnes per single network spread
Priority 3	146	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:

10-20 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.
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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 refuse and recycling collection services must be provided at all times but any sites where access cannot be gained due to ice must be reported to the Authorised Client 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 3 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 shortage of salt supply 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.

I1 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.

I2 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 intended to be a non technical summary of the plan.

In the time since last year's Winter Service plan was approved by Cabinet in Haringey, Government has issued self-help advice for people who want to clear snow and ice from outside their premises at home or at work. This can be found on the following link to the DirectGov web-site:

http://www.direct.gov.uk/en/NI1/Newsroom/DG_191868

To support self-help in Haringey the Council is proposing to offer the provision of snow shovels free of charge upon request to recognised resident groups and Neighbourhood Watch Groups. This will be especially useful where they can be used to assist vulnerable and less able-bodied residents in Haringey.

The same web-site also provides tips for driving safely in severe weather. This can be found on the following link;

[tp://www.direct.gov.uk/en/TravelAndTransport/Usingmotorwaysandroads/Breakdownsdrivingconditions/DG_185021](http://www.direct.gov.uk/en/TravelAndTransport/Usingmotorwaysandroads/Breakdownsdrivingconditions/DG_185021)

I3 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 www.hackney.gov.uk
Contact number - 020 8356 3000

Islington www.islington.gov.uk
Contact number - 020 7527 2000

Enfield www.enfield.gov.uk
Contact number - 020 8379 1000

Barnet www.barnet.gov.uk
Contact number - 020 8359 2000

Waltham Forest www.walthamforest.gov.uk
Contact number - 020 8496 3000

Camden www.camden.gov.uk
Contact number – 020 7974 4444

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

I4 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.

I5 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 Veolia 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***

Veolia Call Centre: **Normal Office hours** **- 020 8885 7700**

Outside normal office hours **- not applicable***

***Note that Veolia 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 Veolia to deal with.**

I6 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.

I7 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.

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.

