



Keep London Moving

Through Severe Winter Weather

November 09

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Acknowledgements

The Gritting Panel Review Team would like to acknowledge the help and support it has received in preparing this document from those listed below.

City of London Corporation

Transport for London

National Health Service

London Ambulance Service

GRITTING PANEL REVIEW TEAM

London Technical Advisors Group

London Councils

London Fire Brigade

SUPPORT CONSULTANTS

Atkins

Executive Summary

In 2009 London experienced the most severe winter weather for 18 years, resulting in widespread disruption to travel across much of the capital. The severe snowfall resulted in London's buses being unable to operate for a period of time and restricted access to London's underground and rail. These events emphasised that the effective management of highways during winter is essential to London's economic and social wellbeing.

In response to the lessons learnt, this document provides guidance on how London should co-ordinate and manage severe winter weather events in the future. It describes how winter should be planned for and provides the responsibilities of London's key stakeholders for maintaining essential services. In addition it describes how they should co-ordinate priorities for clearing ice and snow.

Importance of London's Highways

Maintaining safe and accessible highways to meet the needs of Londoners is the responsibility of highway authorities, including Transport for London, the London Boroughs and the City of London. During winter this service extends to keeping carriageways and footways free from ice and snow. This part of the highway service is termed Winter Service. Access to the public highway during winter weather is a pre-requisite for the key stakeholders to operate essential services. Other than London's highway authorities, the key stakeholders are:

- London Ambulance Service;
- London Fire Brigade;
- National Health Service;
- London bus companies;
- The Metropolitan Police and the City of London Police.

Other stakeholders where accessibility should be considered include; schools, social services, meals on wheels and homes for the vulnerable.

Key Stakeholder Responsibilities

Responsibilities for dealing with winter arrangements have been identified for the following key stakeholders:

- Highway authorities have a statutory duty to ensure, so far as is reasonably practicable, that the highway is kept free from ice and snow. As such, highway authorities prepare Winter Service Plans setting out how they will discharge this duty. In developing their Plans highway authorities should determine important areas of infrastructure in conjunction with stakeholders. These include those key stakeholders described in this guidance and seek to ensure that appropriate winter treatment has been considered by the appropriate party. Highway authorities must consider safe and reliable access to these facilities when planning treatment routes. In doing so, they should ensure that staff associated with these key stakeholders can access their premises, as reasonably practical.
- The London Ambulance Service is responsible for clearing snow and ice from their premises, including access roads at all times.
- The London Fire Brigade is responsible for clearing snow and ice from their premises including access roads at all times. In addition, the London Fire Brigade through the London Local Authority Co-ordination Centre is responsible for co-ordination of mutual aid and support to and delivery of strategic co-ordination of the local authority response, in the event of the London Local Authority Gold arrangements being activated.

- The National Health Service and others, including all related services such as clinics and surgeries are responsible for clearing snow and ice from their premises at all times, including; access roads, car parks and other facilities used by the public.
- London bus companies are responsible for clearing snow and ice from their premises at all times including; access roads and facilities used by the public.
- The Metropolitan Police and the City of London Police are responsible for clearing snow and ice from their premises, including access roads, at all times.

It is the responsibility of all key stakeholders to co-ordinate activities in planning for winter.

Pan-London Contingency Plan

For the event of severe winter weather, Transport for London and the London Technical Advisors Group whose members comprise all of London's highway authorities, have collated and made available a Pan-London Resilience Network, a reduced treatment network comprising core routes only. This network should include TfL roads, principal local roads and public roads to essential services, including key stakeholders. As such, it provides common priority routes for London that will be maintained and enable travel on core routes, across London including principal public transport routes, accesses to ambulance stations, fire stations and National Health Service premises.

On 1 December a Pan-London exercise is planned to test the arrangements for response to severe winter weather. This will include a decision on how the Pan-London Resilience Network is to be activated. The Transport for London Streets Traffic Control Centre will assist in providing a co-ordination role in managing its implementation, including communication with key stakeholders.

As part of this contingency plan, Winter Service will be provided that has sufficient resilience for unpredictable winter weather events including extreme snowfall. This should be based on six days capacity to successively treat the Pan-London Resilience Network with salt.

Mutual Aid

LLACC will support in facilitating mutual aid in the event of London Local Authority Gold arrangements being activated. London Boroughs are working towards formal mutual aid agreements in the event of these circumstances. In addition, London highway authorities may use informal mutual aid arrangements to support their contingency plans for dealing with severe winter weather.

Priorities for Treatment

In normal winter conditions, priorities for treatment will be determined by each of London's highway authorities based on their established maintenance hierarchies for carriageways and footways. Each authority will amend these accordingly for winter following their Winter Service Policy and based on a risk assessment. In the event of severe winter weather the Pan-London Resilience Network will be used for carriageways. Priorities for footways will be determined locally by each highway authority through consultation with stakeholders, to ensure that access is maintained to essential facilities.

Use of Snow Ploughs

In the event of snow, snow ploughs are likely to be suitable for use on some roads such as those where Transport for London has responsibility and local roads where accesses, junctions and parked vehicles are less of an issue. However, the highly urban nature of the network means that it is not appropriate for all London's highway authorities to own and use snow ploughs.

Communications

London highway authorities should ensure effective communication of information for the public before and during both normal and severe winter weather conditions. This should include management of expectations such as advising that it may not be possible to have business as usual during extreme winter weather conditions, and that it may be safer to avoid unnecessary travel for a short period of time.

Introduction

- 1 Highways are one of London's largest public assets and enable the social and economic wellbeing of its community. Safe and reliable highways are fundamental, being the starting and finishing point of almost all journeys in London. They provide access to the underground, rail and bus services and enable London's emergency services to operate effectively.

Winter Service

- 2 Maintaining safe and accessible highways to meet the needs of Londoners is the responsibility of the highway authorities. During winter, this service extends to keeping highways free from ice and snow. This part of the highway service is termed Winter Service. Although a very specialised area, Winter Service is a significant aspect of the overall highway service both in the resources it uses and its contribution to maintaining a safe and accessible network, especially in times of severe winter weather.
- 3 Over recent years the impact of climate change has become noticeable in London, with a decreasing number of snowy days and generally milder winters. Climate change however, is not only likely to mean milder and wetter winters but more occurrences of severe weather events (UK Climate Projections)¹. In 2009 London experienced the most severe winter weather for 18 years resulting in widespread disruption to travel across much of the capital. The severe snowfall resulted in buses being unable to operate for a period of time and restricted access to underground and rail facilities.
- 4 These events provide a reminder that it is critical to London's economic and social wellbeing that adequate preparation is made for both normal and severe winter conditions. Collaboration between all of London's key stakeholders, including highway authorities, will help ensure disruption is minimised and travel conditions are as safe as possible during future winters.
- 5 Given the scale of financial and other resources involved in delivering the Winter Service, it is not reasonable either to provide the service to all of London's highways or to ensure all running surfaces are kept free of ice or snow at all times, even on treated highways and footways. It is therefore essential that the available resources are prioritised to ensure that strategic transport routes and essential services, including public transport are maintained.

Effective management of Winter Service is essential to London's economic and social wellbeing.

Lessons from February 2009

- 6 The events of February 2009 provide a lesson in what can happen in severe winter weather. The London Assembly Report *Slipping up*² identified a number of recommendations for how London could better plan for winter in the future. Nationally, the UK Roads Liaison Group³ has reported to the Secretary of State on the lessons learnt from those events. The London Regional Resilience Forum produced their severe weather debrief in May⁴ with findings on how similar events could be managed in the future. This guidance takes into account all relevant findings and recommendations.

How will London Prepare Better?

- 7 In order to prepare and execute policies and plans better for severe winter weather and consider the lessons learnt from February, the Local Authority Panel has set up the Gritting Panel Review Team, with the London Technical Advisors Group Co-Chairs and representatives from Transport for London (TfL), London Councils, London Fire Brigade, Metropolitan Police, National Health Service (NHS) and London Ambulance Service. This document provides guidance for London to manage severe winter weather events in the future, including:

- Planning for winter;
- Responsibilities of key stakeholders;
- Planning and co-ordination during the event;
- Priorities for clearing ice and snow;
- Priorities for salting of carriageways and footways;
- Delivery of the Winter Service.

London has a co-ordinated approach to deal with severe winter weather.

Planning for Winter

8 It is essential that accessibility to London's highways is maintained for movement of people to enable:

- Emergency services to function in order to maintain the safety and wellbeing of Londoners;
- Travel to work, schools, hospitals, doctors' surgeries and other essential daily activities;
- Public transport to operate effectively.

9 It is however recognised that the severity of winter may be unpredictable and the events of February 2009 act as a reminder of what can happen. Weather forecasting, although reliable in the short and medium term, is less reliable in the long term. This in itself impedes the ability of highway authorities to plan their resources in advance for the delivery of the Winter Service. Judgements by TfL and the Boroughs in conducting the Winter Service need therefore to be immediate rather than long term. As such, there is considerable risk in managing the delivery of the Winter Service. Ensuring there is sufficient resilience in the delivery of the Winter Service for unexpected and severe events is therefore key in achieving effective management of the Service and meeting the needs of Londoners.

The Winter Service must be resilient to accommodate severe winter weather.

Stakeholders

10 London comprises a diverse network of highways that include carriageways, bus routes, footways, cycle routes and pedestrian precincts. Maintaining the public highway is the responsibility of London's highway authorities; these include the 32 London Boroughs, the City of London Corporation and TfL. TfL is responsible for London's Red Routes, the strategic road network that includes the A406, A205 and A13 together with roads in central London such as the A3212 and A501. This accounts for about 5% of London's roads but 30% of London's traffic. The Boroughs are responsible for the remaining local roads. The Highways Agency is responsible for motorways in England including the M25, its associated slip and link roads, and motorways within London, including the M4, M1 and M11.

11 In addition to this, there are many private roads, car parks and private accesses onto the public highway. Some of these are critical in that they provide access to hospitals, emergency services, doctors' surgeries and homes for the elderly. The efficient operation of many of London's essential public services may be dependent on the removal of ice and/or snow from key areas of

private land, such as access to bus depots and ambulance stations, which is fundamentally the responsibility of land owners.

- 12 In addition to the highway authorities, London has a number of stakeholders, each of whom contributes to the provision of essential services that will enable London to operate effectively in winter. These are:
- London Ambulance Service;
 - London Fire Brigade;
 - NHS;
 - London bus companies;
 - The Metropolitan Police and the City of London Police.
- 13 The following member organisations provide leadership to London's highway authorities in various aspects, including Winter Service and emergency planning.
- London Councils;
 - Local Authority Panel, London Local Authority Co-ordination Centre, London Local Authority Gold;
 - Greater London Authority (GLA);
 - London Technical Advisors Group (LoTAG).
- 14 Access to the public highway is a pre-requisite for these stakeholders to deliver many of their services.

Responsibilities of London's Stakeholders

Highway Authorities

- 15 London's highway authorities are TfL, the London Boroughs and the City of London. The Highways Act 1980, as amended by the Railways and Transport Safety Act 2003, places a duty on highway authorities to ensure, so far as is reasonably practicable, that the highway is kept free from ice and snow.
- 16 Recommendations and advice on the delivery of the Winter Service are set out in the Code of Practice for Highway Maintenance Management, *Well-maintained Highways, 2005*⁵. This document is amended regularly through supplementary guidance issued by the Department for Transport through the UK Roads Liaison Group and its Boards.
- 17 Highway authorities are advised to develop a Winter Service Policy and Plan. The Policy sets out intentions for meeting their statutory and local requirements and the Plan sets out how the service would be delivered.
- 18 In developing their Plans, they should determine important areas of infrastructure in conjunction with stakeholders, including those described in this guidance and seek to ensure that appropriate winter treatment has been considered by the appropriate party. Highway authorities should also consider that many buses operate on roads for which the London Boroughs and the City of London are responsible.
- 19 The Boroughs and the City of London also have a duty under the Civil Contingencies Act 2004 to assess the risk of an emergency occurring and where the risk is high, maintain plans to mitigate such emergencies.

- 20 The London Boroughs, the City of London and TfL work together in preparing for winter through the LoTAG, who promote collective working and best practice. As such, it co-ordinates and collaborates in the delivery of Winter Service for London's highway authorities.

London Local Authority Gold

- 21 The London Local Authority Co-ordination Centre (LLACC) will work with London authorities to co-ordinate severe winter weather events. Under the direction of London Local Authority Gold (LLAG), the LLACC will be responsible for co-ordination of mutual aid and support to and delivery of strategic co-ordination of the local authority response.

London Local Authority Co-ordination Centre

- 22 In the event of the LLAG arrangements being activated, mutual aid will be co-ordinated through the LLACC under the direction of LLAG. The London Fire Brigade hosts LLACC who are responsible for the co-ordination of the Pan-London collective local authority response to the incident.

London Ambulance Service

- 23 The London Ambulance Service is responsible for clearing snow and ice from their premises at all times, including access roads. The highway authorities are responsible for clearing public highways. At all times it is essential that London Ambulance Service staff can access their premises. Highway authorities must consider safe and reliable access to these facilities and consult and co-ordinate accordingly with the London Ambulance Service regarding locations of stations, when planning treatment routes.

London Fire Brigade

- 24 The London Fire Brigade is responsible for clearing snow and ice from their premises at all times, including access roads. The highway authorities are responsible for clearing public highways. At all times it is essential that London Fire Brigade staff can access their premises. Highway authorities must consider safe and reliable access to these facilities and consult and co-ordinate accordingly with the London Fire Brigade regarding locations of stations when planning treatment routes. In addition, the London Fire Brigade, through LLACC, has a role in co-ordination of mutual aid and support to and delivery of strategic co-ordination of the local authority response, in the event of the LLAG arrangements being activated.

Metropolitan Police and City of London Police

- 25 Both the Metropolitan Police and the City of London Police are responsible for clearing snow and ice from their premises at all times, including access roads. The highway authorities are responsible for clearing public highways. At all times it is essential that Police staff can access their premises. Highway authorities must consider safe and reliable access to these facilities and consult and co-ordinate accordingly with the Metropolitan Police and the City of London Police regarding locations of stations, when planning treatment routes.

NHS

- 26 The NHS and others, including all related services such as clinics and doctors' surgeries, are responsible for clearing snow and ice from their premises at all times. This includes car parks and other facilities used by the public, such as access roads. The highway authorities are responsible for clearing public highways. At all times it is essential that hospital and other staff, the public and ambulances can access their premises. Highway authorities must consider safe and reliable access to these facilities and consult and co-ordinate accordingly with NHS regarding locations of facilities, when planning treatment routes.

London Bus Companies

- 27 London bus companies are responsible for clearing snow and ice from their premises at all times, including facilities used by the public, such as access roads. Highway authorities are responsible for clearing public highways. At all times it is essential that staff can access their premises. Highway authorities must consider safe and reliable access to these facilities and consult and co-ordinate accordingly with bus companies regarding locations of facilities, when planning treatment routes.
- 28 It is recognised that although changes to bus routes may be made throughout the winter, it will not usually be practical or desirable for highway authorities to change their treated network. Close liaison between highway authorities and London bus companies is essential to ensure potential impact is taken into consideration when deciding the nature and timing of changes to bus routes.

Responsibilities for dealing with winter arrangements have been identified for all key stakeholders.

Communications

- 29 London highway authorities should ensure that there is appropriate consultation and communication with other highway authorities and other stakeholders. Information shared should include:
- Winter Service Plans;
 - A non-technical summary of the Winter Service Plan;
 - Maps of treatment routes;
 - Operational decisions on a timely basis;
 - Resources and locations.

Planning for Severe Winter Weather

- 30 In normal winter weather all highway authorities are responsible for the delivery of the Winter Service in accordance with their Winter Service Policies and Plans. In severe winter weather conditions a contingency plan should be activated. Success of this plan is dependent on advance planning and co-ordination which comprises:
- Preparation of agreed treatment routes, ensuring that essential services are maintained in severe winter weather;
 - Establishing resource needs and facilitating mutual aid ensuring necessary arrangements are in place in advance;
 - Communicating these activities with stakeholders.

Contingency Plans

- 31 For the event of severe winter weather, LoTAG has agreed a joint approach between all London highway authorities who have collated and made available a Pan-London Resilience Network, which comprises core routes only. This network should include TfL roads, principal local roads and public roads to essential services, including key stakeholders. As such, it provides common priority routes for London that should be maintained in the event of severe winter weather. This will enable travel on essential routes across London including; strategic transport routes, routes to ambulance stations, fire stations and hospitals and the principal bus routes.
- 32 On 1 December a Pan-London exercise is planned to test the arrangements for response to severe winter weather. This will include a decision on how the Pan-London Resilience Network is

to be activated. The TfL Streets Traffic Control Centre will assist in providing a co-ordination role in managing its implementation, including communication with key stakeholders.

- 33 The Pan-London Resilience Network will enable London bus companies to run core services, as appropriate.

A Pan-London Resilience Network should be triggered in the event of severe winter weather, to ensure essential services across London are available.

Mutual Aid

- 34 LLACC will support in facilitating mutual aid in the event of London Local Authority Gold arrangements being activated. London Boroughs are working towards formal mutual aid agreements in the event of these circumstances. In addition, London highway authorities may use informal mutual aid arrangements to support their contingency plans for dealing with severe winter weather. These should enable resources to be shared between authorities in times of essential need. Examples of where this may be effective include the sharing of snow ploughs, gritters, depots, staff and salt stocks.

Communications

- 35 London highway authorities should ensure effective communication of information for the public before and during both normal and severe winter weather conditions. This should include management of expectations such as advising that it may not be possible to have business as usual during extreme winter weather conditions, and that it may be safer to avoid unnecessary travel for a short period of time.
- 36 It is of crucial importance that policies and standards of Winter Service are widely available and understood by Londoners. As far as possible, highway users should be made familiar with treatment routes, particularly in severe winter weather conditions. This will help ensure that expectations are realistic and consistent with the resources available, as well as maintaining public safety.
- 37 The location of treatment routes that comprise the Pan-London Resilience Network will be made available to stakeholders via the TfL Borough Partnerships Extranet.

Determining Priorities

Normal Winter Conditions

- 38 Each London highway authority has its own Winter Service Policy. Each highway authority will determine its own priorities for treatment routes during normal winter weather, based on their maintenance hierarchy, as described in *Well-maintained Highways*, but adapted to take into account factors identified in its Policy.

Carriageways

- 39 In normal winter conditions priorities for carriageway treatment should be based on, amongst other things, the strategic importance of the route and traffic volumes. Each highway authority should determine its own priorities and frequency for treatment. This is likely to reflect its carriageway hierarchy developed in accordance with *Well-maintained Highways* but will require modification to reflect the demands of Winter Service. Consideration should be given to:
- Access routes to strategic areas such as hospitals, ambulance and fire stations;
 - Bus routes;
 - Access to bus depots;

- Areas known to cause problems or be high risk in winter.

40 Planning and co-ordination between highway authorities and with LoTAG will ensure continuity across highway boundaries. In the event of severe winter weather, the Pan-London Resilience Network should be implemented.

Footways

41 A significant number of pedestrians use London's footways each day to access places of work, public transport and shopping facilities. Maintaining footways that are free from ice and snow is therefore a key consideration in determining priorities. Each highway authority should make its own decisions regarding priorities and frequency of treatment for clearing footways. This is likely to reflect their footway hierarchy developed in accordance with *Well-maintained Highways* but will require modification to reflect the demands of Winter Service. Consideration should be given to:

- The footfall of individual streets during winter;
- Strategic importance of the footway such as public transport interchanges and shopping precincts;
- Economic importance such as access to places of work;
- The contribution to social inclusion such as pedestrian links to schools, doctors' surgeries, homes for the elderly;
- High risk areas such as ramps and steps, subways or pedestrian bridges.

42 Each highway authority should make a decision as to the location of grit bins and should be responsible for determining individual priorities for footways in severe winter weather. These bins may be stocked with salt or a salt/grit mix based on specific needs identified by the highway authority.

Footway priorities should be identified by each highway authority.

Private and Important Infrastructure

43 There are a number of private streets, roads and car parks in London managed by some of the key stakeholders. In instances, these areas are critical to essential and emergency services. They include access to fire and ambulance stations, hospitals and bus depots. Ensuring access is maintained during severe winter weather is essential, to ensure that London's emergency services operate and that essential services such as hospitals and doctors' surgeries continue to be accessible for the safety and wellbeing of Londoners. Clearing ice and snow from these areas is the responsibility of the owners. Highway authorities must consider safe and reliable highways up to the access to these facilities and consult and co-ordinate accordingly with the owners of the facilities when planning treatment routes.

Delivery of the Service

44 Effective delivery of the Winter Service requires adequate resources including salt, salt spreaders, snow ploughs, trained operatives, de-icing material and effective supply chain management. The use of these resources in severe winter weather conditions needs to be tested. London's approach to managing these essential resources in delivering the Winter Service is described below.

Salt Spreaders

45 There is a wide range of salt spreaders available for carriageways and each highway authority will decide on the most suitable equipment. Spreaders may be demountable or fixed chassis and are available in various capacities.

46 Global positioning systems may be used to enable treatment routes to be recorded and ensure that gritting has been undertaken.

47 The size, composition and standard of the vehicle fleet are key parameters influencing the effectiveness and efficiency of the Winter Service.

Snow Ploughs

48 Snow ploughs are used to remove significant depths of snow from carriageways and footways. Repeated applications of salt in snow are inefficient and may also lead to slippery and very wet conditions.

49 Some, but not all, London Boroughs currently own snow ploughs. In London these snow ploughs normally have demountable blades which will enable them to be fixed on vehicles other than salt spreaders providing flexibility and facilitating mutual aid.

50 Snow ploughs are not suitable in all locations in London. In particular they are unsuitable for use on many carriageways because of restricted road widths and the displaced snow blocking footways, side roads as well as windrows creating problems for parked cars. They are likely to be suitable for use on some roads such as the TfL network and Borough roads where accesses, junctions and parked vehicles are less of an issue. It is not therefore appropriate for all London Boroughs to own and use snow ploughs.

51 Each highway authority will make its own decisions regarding the use of snow ploughs. This should be a formal assessment based upon a risk/benefit based approach. Where Boroughs do not have snow ploughs, the use of mutual aid should be considered in order to share resources and maintain the same level of service throughout London.

Snow ploughs are likely to be suitable for use on some roads such as the TfL network and local roads where accesses, junctions and parked vehicles are less of an issue. It is not appropriate for all London Boroughs to own and use snow ploughs.

Staff and Operatives

52 An adequate number of experienced and fully trained staff and operatives are essential to the effective delivery of the Winter Service. It is especially important that experienced staff are available to direct and supervise operations and that qualified operative numbers are sufficient to meet the drivers' hours regulations.

Salt

53 Rock salt is the most common material for dealing with ice and snow on London's roads. It is primarily supplied from Cheshire, Teesside and Northern Ireland. It is transported either by road or sea. For salt to work effectively, it requires the passage of traffic to crush the salt. Equally, on footways footfall is required to crush the salt. Salt will not work in extremely low temperatures, normally below -12°C.

Treatment

54 Highway authorities should use salt to treat carriageways to prevent the formation of ice and snow, based on the approach in their Winter Service Plan. Further guidance on the timing of treatments is given in *Well-maintained Highways*.

55 The different treatments adopted by highways authorities are as follows:

- **Precautionary salting** should be undertaken before the formation of ice or when potentially hazardous road conditions have been forecast.

- **Post salting** should be carried out to melt and disperse ice that has already formed. This may occur when rain is immediately followed by freezing conditions or during freezing rain. Treatment should be carried out as soon as possible after the accumulation of snow.
- **Snow clearance** should utilise all available resources to ensure that all carriageways and footways are dealt with in priority order.
- **Successive Salting** should be carried out in severe winter weather conditions, such as severe snow conditions and undertaken until the highway is deemed safe. Highway authorities should carry out successive treatments for the duration of the severe weather event. The frequency of these treatments will be based on; length of network, fleet and operatives available.

56 Salting should be undertaken as close as possible to the formation of ice and snow, although due consideration should be given to traffic especially in rush hour.

Resilience of Salt Supply

57 London should provide a Winter Service that has resilience for unpredictable winter events such as extreme snowfall. This means greater capacity will be provided in the delivery of the service to meet the challenge of these events.

58 The capacity to treat the Pan-London Resilience Network will be measured in the number of days for which an essential service can be provided to keep London moving.

59 This will be based on the stockpiles of salt available to highway authorities for dealing with severe winter weather and to enable successive salting of the Pan-London Resilience Network. All highway authorities should have six days capacity in salt stockpiles to deal with severe winter weather conditions on the Pan-London Resilience Network.

All London highway authorities should have six days capacity of salt stockpiles to successively treat the Pan-London Resilience Network in severe winter weather conditions.

Supply of Salt

60 London's highway authorities have reviewed the way re-stocking of salt is managed during the winter. More robust relationships should be established with salt suppliers in order to ensure that essential supplies are obtained when required. This joint approach to salt provision will also support the needs of London's key stakeholders. In doing this, innovative approaches to the supply and storage of salt should be considered.

61 In the short term, London's highway authorities should develop relationships with salt suppliers to ensure stocks and deliveries can be safeguarded. In the longer term, LoTAG should explore the development of Pan-London salt provision and supplier relationship.

Testing the Delivery of the Winter Service

62 The effectiveness of London's plans for the delivery of Winter Service in London for normal and severe winter conditions will be tested in a planned table-top exercise. This Pan-London exercise will test the capital's ability to co-ordinate and deliver the Winter Service. Lessons learnt from this exercise will be incorporated in continuously improving London's arrangements.

London's plans for severe winter weather conditions will be tested using a planned exercise.

Summary of Key Points

- Effective management of the Winter Service is essential to London's economic and social wellbeing.
- London has a co-ordinated approach to deal with severe winter weather.
- The Winter Service must be resilient to accommodate severe winter weather.
- Responsibilities for dealing with winter arrangements have been identified for all key stakeholders.
- A Pan-London Resilience Network should be triggered in the event of severe winter weather, to ensure essential services across London are available.
- Footway priorities should be identified by each highway authority.
- Snow ploughs are likely to be suitable for use on some roads such as the TfL network and local roads where accesses, junctions and parked vehicles are less of an issue. It is not appropriate for all London Boroughs to own and use snow ploughs.
- All London highway authorities should have six days capacity of salt stockpiles to treat the Pan-London Resilience Network in severe winter weather conditions.
- London's plans for severe winter weather conditions will be tested using a planned exercise.

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