From:	Bryan Sweetland, Cabinet Member – Environment, Highways & Waste John Burr – Director of Highways and Transportation
То:	Environment, Highways & Waste Cabinet Committee
Date:	20 September 2012
Subject:	Highways and Transportation Winter Service Policy for 2012/13
Classificatio	on: Unrestricted

Summary:

Each year Highways and Transportation reviews the Council's Highways and Transportation Winter Service Policy and the operational plan that supports it in light of changes in national guidance and lessons learnt from the previous winter. This report sets out proposed amendments following the review.

Recommendation:

That the committee endorse the proposed changes to the Highways and Transportation Winter Service Policy and Plan for 2012/13 for the Cabinet Member to agree.

1. Introduction

1 (1). As a result of three successive bad winters, national guidance has been issued by the Department for Transport and is detailed in the code of practice for highway authorities – Well Maintained Highways - section 13 Winter Service. Much of the guidance provided has long been incorporated in the Highways and Transportation (H&T) winter service policy and plan. Additions to the policy are reported below

2. Financial implications

2. (1) The allocated budget for winter service for 2012/13 is £3,237,704. £20,000 of this was allocated for the purchase of additional salt bins.

3. Bold Steps for Kent and Policy Framework

3. (1) The revisions to the winter service policy meet the objectives of the Council's medium term plan for 2014/15, Bold Steps for Kent. One of the priorities of Bold Steps is to ensure that the Council gets ever greater value for money from our services and seeks more efficient provision of those services. The proposals for the winter service policy support this approach. Working in partnership with other authorities contributes towards achieving a better service and value for money for Kent residents.

3. (2) Putting the citizen in control will be achieved by continuing to provide salt bags to parishes who request them. Salt bins will be provided across the county and this year for the first time these will be identified on a map on the Kent County Council website. Advice on how people in the Kent community can self help during winter conditions will also be included on the website, including road safety tips.

3. (3) The service aims to ensure a safe operational highway network thus providing access to KCC services for all.

4. Winter resilience

4 (1) Well Maintained Highways recommends that local authorities identify a minimum network that would be treated continuously for a period of six days in the event of a severe winter event. For Kent we have identified this as being the main strategic network, i.e. all A and B roads and some other locally important roads as identified in the highway network hierarchy. Essentially, these equate to the current primary routes minus the local roads and roads that go through estates etc. H&T will always endeavour to treat the entire primary network as identified in the policy but recognise that there may be times as experienced in previous years where it will be prudent to reduce the network as stated above to maintain our salt levels and keep the main roads in Kent moving as much as possible

4. (2) Additionally H&T have identified an Operational Winter Period which is April and October, and a Core Winter Period which is December to February and the stocks of salt needed during those periods to effectively treat the network in line with recommended resilience levels. The resilience levels are shown at Appendix A. H&T have 23,000 tonnes in stock so we are well within the recommended resilience level. Arrangements are in place for winter deliveries to keep us topped up during winter and 2000 tonnes are held in a strategic stockpile at Faversham Highway depot.

5. Collaboration with neighbouring authorities

5. (1) In previous years good relationships have been established with the Highways Agency MAC Area 4 who manage the trunk roads and motorways in Kent. KCC shares two depots with the HA and there has been a reciprocal

salt sharing arrangement for some time which has worked very well. Additionally there is an arrangement with Medway Council in respect of the weather forecast and treating areas on the borders of Kent and Medway. This year H&T are participating in a meeting for surrounding authorities including West Sussex, Brighton and Hove, the Highways Agency and Connect Plus who treat the roads in Area 5 which includes the Dartford Bridge and tunnel. The meeting will provide the opportunity for the authorities to share policies and plans and discuss plans for mutual aid and where possible joint training and winter scenario exercising.

6. Media and communication

6. (1) Providing information to the people of Kent is a crucial part of delivering the winter service. Over the past two years much work has gone into developing the winter page of the KCC website including information on salting routes, salt bin locations and links to local district plans and road safety information. The site has been very successful, registering more hits during the winter months than any other part of the KCC website. This year for the first time the location of salt bins will be included on a map layer of Kent View so that residents can find out exactly where the nearest salt bin is to their homes. All KCC salt bins will be labelled as property of KCC and with a short message about how the contents should be used.

6. (2) Close working with local media organisations over the past few years has been beneficial and has increased positive coverage for the winter service. This year the media – radio, television and press – will be provided with pre prepared media briefs in advance of the winter season detailing the basics of the winter service. Key staff in H&T are working with the press office to prepare generic statements and press releases for rapid issue at the onset of winter conditions. These will be pre approved for use during periods of severe conditions when the winter service delivery team will be busy.

7. Public transport

7. (1) Resources do not allow for the treatment of all public transport networks. However H&T are working closely with bus companies across the county to ensure that where possible communication channels are put in place so that the public can be informed of any changes to routes due to snow and ice. For the first time last year H&T provided salt to selected railway stations across the county in salt bins provided by South East trains. This was very successful and will be repeated this year.

8. Forecast and ice prediction service

8. (1) The three year contract for the weather forecast expired earlier this year. A tender process has been commenced and a new three year contract

will be in place in time for the start of the winter service. The ice prediction service will continue to be provided by Vaisala Ltd.

9. Winter Service Policy and Plan 2011/12

9. (1) The Winter Service Policy is presented at Appendix B. The revisions as stated in the above paragraphs are detailed in the Policy. The Winter Service Policy is supported by an operational Plan which has been updated in line with the Policy and discussions have been had with our contractor Enterprise plc to ensure that plans are aligned. The Plan is available for Members to view on request from Highways and Transportation. In addition district plans have been developed in conjunction with district councils across the county and these will be used together with the Policy and Plan to deliver the winter service.

6. Conclusion

6. (1) The Winter Service Policy sets out Highways and Transportation's arrangements to deliver a winter service across Kent. The following revisions have been made this year:

(a) Identification of an Overall Winter Service and Core Winter Service Period

(b) Minimum winter service network

(c) Levels of salt needed to maintain resilience for the (a) and (b) above

(d) Salt bins will be identified on a map on Kent.gov

(e) A new three year contract to provide a winter weather forecast service will be in place for the start of the winter service season

7. Recommendations

7. (1) It is recommended that the Committee endorse the updated Winter Service Policy for 2012/13

8. Background documents

8. (1) The UK Road Liaison Group's Well Maintained Highways - Section 13 Winter Service

9. Contact details

Report Author:

Name:	Carol Valentine
Title:	Highway Manager (West)
Tel No:	08454 242800
Email:	carol.valentine@kent.gov.uk

Head of Service:

Name:	Spencer Palmer
Title:	Head of Highway Operations
Email:	spencer.palmer@kent.gov.uk

Appendix A

Minimum Salt Stock

Minimum Stock					
Routes	Normal salting network	Minimum Winter Network (tonnes/run	Full Pre season stock (12 days/48 runs)	Core winter period 6 days/36 runs	Overall winter period Minimum Network(3 days/18 runs)
Primary	350	350	16,800	12,600	6,300
Secondary	300	0	0	1800	5400
Total			16,800	14,400	11,700

Overall winter period - 12th October to 26th April Core winter period - 1st November to 1st March Days resilience (overall winter period) 3 days

Days resilience (core winter period) 6 days

The minimum in season stocks are the minimum to which stocks should be allowed to fall, i.e. restocking should take place well before the minimum is likely to be reached Kent County Council

Winter Service Policy

Highways and Transportation Plan for 2012/13 Winter Service Period

H&T CV 9/20/2012

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1. INTRODUCTION

1.1 Winter Service - Statutory Duty

- 1.1.1 The statutory basis for Winter Service in England and Wales is Section 41(1A of the Highways Act 1980, modified on 31st October 2003 by Section 111 of the Railways and Transport Act 2003 - "(1A) In particular, a highway authority is under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.
- 1.1.2 The County Council recognises that the winter service is essential in aiding the safe movement of highway users, maintaining communications, reducing delays and enabling everyday life to continue. It is very important to both road safety and the local economy. The winter service that the County Council provides is believed to be sufficient so far as is reasonably practical to discharge the duty imposed by the legislation.
- 1.1.3 The County Council, as highway authority, takes its winter service responsibilities extremely seriously. However, it is important to recognise that the council has to prioritise its response to deal with winter weather due to the logistics and available resources.
- 1.1.4 Highways and Transportation provides the winter service through a contractual arrangement between Kent County Council and Enterprise plc,

1.2 Winter Service Standards

- 1.2.1. In order to respond as quickly and efficiently as possible to its responsibilities Highways and Transportation has adopted policies and standards for each of the winter service activities and these are detailed within this document. The operational details for the winter service activities in Kent are detailed in the Winter Service Plan 2012/13 that complements this Policy Statement.
- 1.2.2 Highways and Transportation provides a winter service which, as far as reasonably possible will:
 - Minimise the loss of life and injury to highway users, including pedestrians, and preventing damage to vehicles and other property
 - Keep the highway free from obstruction and thereby avoiding unnecessary hindrance to passage

1.3 **County Council Maintained Highways**

1.3.1 Highways and Transportation delivers the winter service on Kent County Council maintained highways.

1.4 Motorways and Trunk Roads

The Department for Transport (DfT) is the highway authority for motorways and all-purpose trunk roads in Kent and the Highways Agency acts for the DfT in this respect. Responsibility for the operational maintenance of motorways and trunk roads lies with the Highways Agency. Highways and Transportation therefore has no responsibility for winter service activities on these roads. However, close liaison exists between the Highways Agency contractors over action taken during the winter service operational period within respective areas of responsibilities.

2. WINTER SERVICE OBJECTIVES

2.1 Salting

- 2.1.1 To prevent the formation of ice on carriageways (precautionary salting)
 - To facilitate the removal of ice and snow from
 - carriageways and footways (post salting).

2.1.2 Roads to be Included within Primary Precautionary Salting Routes

Routine precautionary salting will be carried out on predetermined primary precautionary salting routes covering the following roads:

- Class 'A' and 'B' roads
- Other roads included in the top three tiers of the maintenance hierarchy as defined in the Kent Highway Asset Maintenance Plan. These are termed Major Strategic, Other Strategic and Locally Important roads.
- Other roads identified by Highway Managers (based on local knowledge and experience and input from relevant local stakeholders including district and parish councils), that are particularly hazardous in frosty/icy conditions
- 2.1.3 It would be impractical and financially draining to carry out precautionary salting of footways, pedestrian precincts or cycle ways and therefore no provision has been made. However, there will be a certain amount of salt overspill onto footways and cycle ways when precautionary salting is being carried out on adjacent carriageways. Post salting of footways and cycle ways will be carried out on a priority basis during severe winter weather, as resources permit.

2.1.4 Minimum Winter Network

In the event of a prolonged snow event or other circumstances leading to a shortage of resources including salt, sand and vehicles, precautionary salting will be limited to the main strategic network, i.e. all A and B roads and some other locally important roads as identified in the highway network hierarchy. Essentially, these equate to the current primary routes minus the local roads and roads that go through estates etc.

2.2 **Snow Clearance**

- 2.2.1
- To prevent injury or damage caused by snow
- To remove obstructions caused by the accumulation of snow (section 150 of the Highways Act 1980)
- To reduce delays and inconvenience caused by snow
- 2.2.2 Snow clearance on carriageways will be carried out on a priority basis as detailed in paragraph 6.2.
- 2.2.3 Snow clearance on certain minor route carriageways will be carried out by local farmers and plant operators, who are under agreement to the County Council, using agricultural snow ploughs and snow throwers/blowers. Snow clearance on other minor route carriageways will be carried out as resources permit. Some minor routes and cul-de-sacs will inevitably have to be left to thaw naturally.
- 2.2.4 Snow clearance on footways and cycle ways will be carried out on a priority basis as detailed in paragraph 6.3, utilising KCC Highways and Transportation staff and district council staff where agreements exist.
- 2.2.5 Due to current budget constraints snow fencing will only be erected in exceptional circumstances and with the approval of the appropriate Highway Manager.

2.3 Roadside Salt Bins

To provide motorists and pedestrians with the means of salting small areas of carriageway or footway, where ice is causing difficulty, on roads not covered by primary precautionary salting routes.

3. WINTER SERVICE GENERAL

3.1 Winter Service Contracts

3.1.1 Winter service in Kent is included within the Term Maintenance Contract awarded to Enterprise plc. This contract was awarded in 2011 and is currently in place until 2016.

3.2 Winter Service Season

3.2.1 In Kent the weather can be unpredictable and the occurrence and severity of winter conditions varies considerably through the season, and from year to year. To take account of all possible winter weather the County Council's Operational Winter Service Period runs from mid October to mid April. This year the season runs from the 12 October to the 26th April 2013. The core winter service severe winter service operates between December and February and increased salting runs are planned for this period.

3.3 Salt usage and alternatives to Salt

Pre-wetted salt and dry rock salt is used across the county for precautionary and post salting. In cases of severe snowfall, alternatives to salt will be used including sharp sand and other forms of grit.

3.3.1 A number of alternative materials to salt are now available which can be used for the precautionary and post treatment of ice and snow. The cost of these is extremely high and there are also environmental disadvantages associated with most of them. Salt will therefore, for the time being, remain in use throughout Kent for the precautionary and post treatment of snow and ice.

3.4 Winter resilience standard

At the start of the winter service season H&T will have 23,000 tonnes of salt in stock in depots around the county. National guidance to local authorities suggests a resilience benchmark of 12 days/48 runs i.e. the authority would be able to continuously salt its minimum winter network during its core winter period for 12 days. The level of salt in stock ensures that this number of runs can be carried out.

4. WEATHER INFORMATION

4.1 Weather Information Systems

4.1.1 An effective and efficient winter service is only possible with reliable and accurate information about weather conditions, at the appropriate times in the decision making progress. Highways and Transportation utilises the best weather forecast information currently available allied to the latest computer technology to ensure that decisions are based on the most accurate data available at the time.

4.2 Weather Reports

4.2.1 During the operational winter service period Highways and Transportation will procure detailed daily weather forecasts and reports specifically dedicated to roads within Kent.

4.3 Winter Duty Officers

- 4.3.1 Experienced members of staff from KCC Highways and Transportation will act as Winter Duty Officers, throughout the operational winter service period, on a rota basis. The Officer on duty is responsible for the following:
 - Receiving forecast information from the forecasting agency
 - Monitoring current weather conditions

- Issuing countywide salting instructions for primary and secondary routes
- Issuing the Kent Road Weather Forecast
- 4.3.2 The Kent Road Weather Forecast will be issued daily containing information about expected weather conditions together with any salting instructions. The Winter Duty Officer will also be responsible for issuing forecast updates and any revised salting instructions when necessary. The Kent Road Weather Forecast will be sent to Highways and Transportation, contractors, neighbouring highway authorities, and other relevant agencies.

5. <u>SALTING</u>

5.1 **Planning of Precautionary Salting Routes**

5.1.1 Primary precautionary salting routes will be developed from those lengths of highway that qualify for treatment, whenever ice, frost or snowfall is expected. Each primary precautionary salting route will have a vehicle assigned which is capable of having a snow plough fixed to it, when required. In times of severe snowfall and/or extreme ice formation, dedicated vehicles will be assigned to patrol key strategic routes. Secondary precautionary salting routes will also be developed from other important highways for treatment during severe winter weather conditions.

5.2 **Precautionary Salting**

5.2.1 Precautionary salting will take place on scheduled precautionary salting routes on a pre-planned basis to help prevent formation of ice, frost, and/or the accumulation of snow on carriageway surfaces.

5.3 **Post Salting**

5.3.1 Post salting will normally take place on scheduled precautionary salting routes to treat frost, ice and snow that has already formed on carriageway or footway surfaces. Post salting may also be carried out on roads or sections of road beyond the scheduled precautionary salting routes.

5.4 **Spot Salting**

5.4.1 Spot salting will normally take place on parts or sections of scheduled precautionary salting routes either to help prevent formation of ice, frost and/or the accumulation of snow or as treatment to ice, frost and the accumulation of snow that has already formed on carriageway or footway surfaces. Spot salting may also be required on roads and footways, or sections thereof, beyond the scheduled precautionary salting routes.

5.5 Instructions for Salting of Primary Routes

- 5.5.1 Instructions for precautionary salting of primary routes will be issued if road surface temperatures are expected to fall below freezing unless:
 - Road surfaces are expected to be dry and frost is not expected to form on the road surface
 - Residual salt on the road surface is expected to provide adequate protection against ice or frost forming
- 5.5.2 Instructions for precautionary salting of primary routes will also be issued if snowfall is expected.
- 5.5.3 The Winter Duty Officer will issue routine instructions for precautionary salting of primary routes, for the whole of Kent, by means of the Kent Road Weather Forecast.
- 5.5.4 The Winter Duty Officer or Highway Manager may issue instructions for post salting and spot salting.

5.6 Instructions for Salting of Secondary Routes

5.6.1 The Winter Duty Officer will issue instructions for precautionary salting of secondary routes if heavy frost, widespread ice, or snow, is expected.

6. <u>SNOW CLEARANCE</u>

6.1 **Instructions for Snow Clearance**

- 6.1.1 The Winter Duty Officer and/or the Highway Manager nominated representatives are responsible for issuing snow clearance instructions. Snow clearance will initially take place on scheduled primary precautionary salting routes, based on the priorities given in para. 6.2.1. Subsequently, snow clearance will take place on secondary salting routes and other roads, and footways, on a priority basis.
- 6.1.2 Snow ploughing shall not take place on carriageways where there are physical restrictions due to traffic calming measures, unless it has been deemed safe to do so following a formal risk assessment and a safe method of operation documented.

6.2 **Snow Clearance Priorities on Carriageways**

- 6.2.1 Snow clearance on carriageways should be based on the priorities given below:
 - A229 between M20 and M2, A249 between M20 and M2, A299 and A289;

- Other "A" class roads;
- All other roads included within primary precautionary salting routes;
- One link to other urban centres, villages and hamlets with priority given to bus routes;
- Links to hospitals and police, fire and ambulance stations;
- Links to schools (in term time), stations, medical centres, doctor's surgeries, old people's homes, cemeteries, crematoria and industrial, commercial and shopping centres;
- With the approval of Highway Manager, other routes as resources permit.

6.3 **Snow Clearance Priorities on Footways**

- 6.3.1 Snow clearance on footways should be based on the priorities given below:
 - One footway in and around shopping centres, and on routes to schools (in term time), stations, bus stops, hospitals, medical centres, doctor's surgeries, old people's homes, industrial and commercial centres and on steep gradients elsewhere;
 - One footway on main arteries in residential areas and the second footway in and around local shopping centres;
 - With the approval of Highway Managers, other footways, walking bus routes and cycle ways as resources permit;
 - District council staff will be commissioned to clear agreed priority footways in their local areas. Arrangements are in place between the KCC Director of Highways and Transportation and district council Chief Executive Officers.

6.4 Agricultural Snowploughs for Snow Clearance

6.4.1 Agreements will be entered into whereby snowploughs provided and maintained by Highways and Transportation are assigned to local farmers and plant operators for snow clearance operations, generally on the more rural parts of the highway.

6.5 Snow Throwers/Blowers for Snow Clearance

6.5.1 Highways and Transportation also has a number of snow throwers/blowers, which are allocated to operators on a similar basis to the arrangements for agricultural snowploughs.

7. <u>SEVERE WEATHER CONDITIONS</u>

7.1 Persistent Ice on Minor Roads

7.1.1 During longer periods of cold weather Highway Managers may instruct salting action to deal with persistent ice on minor roads

which are not included within the precautionary salting routes and invoke arrangements with district and parish councils to take action in their local area.

7.2 Ice and Snow Emergencies

7.2.1 During prolonged periods of severe and persistent icing, or significant snow fall, delegated officers may declare an ice or snow emergency covering all or part of the County. In this event Highway Managers will establish a "Snow Desk" and implement a course of action to manage the situation in either of these events.

8.1 **Provision of Roadside Salt Bins**

- 8.1.1 Roadside salt bins can be sited at potentially hazardous locations for use by the public, to treat ice and snow on small areas of the carriageway or footway.
- 8.1.2 Salt bins will be filled using a mixture of sharp sand or other grit material and salt and will be refilled twice during the winter season. In the event of severe weather further refills will be carried out as time and resources permit.
- 8.1.3 Assessment criteria for installing a new salt bin have been devised and are shown at Annex 1. The form will be used by Highway Operations staff to assess requests from parish councils, community groups etc, A sum of money will be allocated from Highways and Transportation to provide these salt bins.

8.2 Payment for salt bins

- 8.2.1 Once a salt bin has been approved by the assessment criteria, the cost of installation, filling and maintenance will be borne by Highways and Transportation.
- 8.2.2 Additionally one tonne bags of a salt/sand mix will be provided to parish councils who request them at the start of the winter season for use in their local area.

8.2.3 Member Highway Fund

Members are able to purchase salt bins using their Member Highway Fund in line with the usual application process.

8.2.4 Parish councils

8.2.4.1 Parish councils are permitted to purchase salt bins and place them on the highway once a suitable location has been approved by a qualified engineer from Highways and Transportation. These salt bins ideally should not be yellow and should be clearly identified by a label as being the property of the parish council. Highways and Transportation will have no obligation to fill or maintain these salt bins. However, the Highway Manager may agree to refill parish-owned salt bins upon request, subject to availability of salt and staff resources and the payment by the parish of an appropriate charge.

9. <u>BUDGETS</u>

9.1 Winter Service Budget

9.1.1 The budget for the annual operational winter service period is based on salting the primary precautionary salting routes on 55 occasions. The main budget is managed by the Head of Highway Operations as a countywide budget.

9.2 Ice and Snow Emergencies

9.2.1 There is no specific budget allocation within Highways and Transportation for ice or snow emergencies. The cost of dealing with periods of icy conditions or significant snowfalls will be met by virement from other planned programmes of work on the highway or from special contingency funds for emergencies.

10. PUBLIC AND MEDIA COMMUNICATIONS

10.1 Neighbouring Authorities and other Agencies

10.1.1 The Kent Road Weather Forecast containing details of the winter service action for Kent will be transmitted daily to neighbouring highway authorities and other agencies so that activities can be co-ordinated regionally.

10.2 The Media

10.2.1 Communicating with communities, businesses and emergency services during winter is essential to delivering an effective service. Local media organisations will be informed when instructions for salting of primary precautionary salting are issued. The Kent County Council Internet site will be updated regularly and the Highway Management Centre will issue road updates.

10.3 **Pre-Season Publicity**

10.3.1 It is important that the public are aware of and understand the Highways and Transportation approach to winter service. The Kent County Council website will have practical advice and guidance including information on the location of salt bins and self help for communities to encourage local action where appropriate.

10.4. Publicity during Ice or Snow Emergencies

10.4.1 Liaison with the news media, particularly local radio stations, is of the utmost importance and links will be established and maintained particularly during ice or snow emergencies.

Annex

SALT BIN ASSESSMENT FORM

Location of Salt Bin	Assessment Date	Assessed by

	Characteristic	Severity	Standard Score	Actual Score
(i)	Gradient	Greater than 1 in 15 1 in 15 to 1 in 29 Less than 1 in 30	75 40 Nil	
(ii)	Severe Bend	Yes No	60 Nil	
(iii)	Close proximity to and falling towards	Heavy trafficked road Moderately trafficked road Lightly trafficked road	90 75 30	
(iv)	Assessed traffic density at peak times	Moderate (traffic group 5) Light (traffic group 6)	40 Nil	
(v)	 Number of premises for which only access 	Over 50 20 - 50 0 - 20	30 20 Nil	
(vi)	Is there a substantial population of either disabled or elderly people	Yes No	20 Nil	

TOTAL

* N.B. Any industrial or shop premises for which this is the only access is to be automatically promoted to the next higher category within characteristic (V).

Any site for which the summation of the weighing factors equals or exceeds 120 would warrant the siting of a salt bin.