From: Mike Whiting, Cabinet Member for Planning, Highways,

Transport and Waste

Simon Jones, Director of Highways, Transportation and Waste

To: Environment and Transport Cabinet Committee – 20 September

2018

Subject: Winter Service Policy for 2018/19

Classification: Unrestricted

Past Pathway of Paper: N/A

Future Pathway of Paper: N/A

Electoral Division: All

Summary: Each year we review the Council's Winter Service Policy and the operational plan that supports it to reflect changes in national guidance and lessons learnt from the previous winter. This report sets out revisions to this year's policy. There is no effect on the number of routes currently delivered.

Recommendation: The Cabinet Committee is asked to note the proposed changes to the Winter Service Policy for 2018/19:

(s.5.5.4) Observational data from road weather sensors will be used to validate pre-salting decisions

- (s. 6.1.1) Secondary routes to be treated when all primary routes treated and resources available
- (s. 6.4.2) Farmers trial to be expanded

1. Introduction

- 1.1 Last winter was cold with December and late January seeing low temperatures with 72 gritting runs carried out between 1st November and 24th February. This compares to the 62 runs that were budgeted for in that period. However, the 'Beast from the East' arrived in Kent on 26th February and lasted for a week and was characterised by heavy snow and very low temperatures. More bad weather followed during the weekend of the 16th to 18th March though this was not as severe as the previous event. On both occasions Kent Highways declared a snow emergency.
- 1.2 During both snow emergencies 33 primary runs were carried out compared with the 22 budgeted for in that period.

2. Financial implications

2.1 The allocated budget for winter service for 2018/9 is £3,158,000. The budget is broken down as follows:

| PRE-SALTING GRITTING | 1,106,471 |
|-----------------------------|-----------|
| OPERATION | |
| PLANT & EQUIPMENT | 1,682,695 |
| SNOWEX MACHINES | 127,029 |
| MAINTENANCE OF FARMERS | 50,000 |
| PLOUGHS | |
| WEATHER FORECASTING | 32,500 |
| ICE PREDICTION | 50,500 |
| SUPPLY & MAINTAIN SALT BINS | 71,105 |
| SUPPLY OF SALT TO DISTRICTS | 12,700 |
| PUBLICITY CAMPAIGN | 25,000 |
| TOTAL | 3,158,000 |

3. Winter planning

- 3.1 During the summer work was done to further refine and improve the winter service; this work focused on:
 - Smart Winter project
 - Route optimisation
 - Secondary route review
 - Farmers route trial
 - Brine saturator procurement
- 3.2 Last year a successful bid was made jointly by KCC and Amey to the Kent Lane Rental Fund for a **Smart Winter project**. The aim of the project is to use technology to increase the numbers of observational sensors on the Kent highway network providing greater data on the road surface temperatures. This will aid in the optimisation of the primary salting routes and provide more detail to the Winter Duty Officers when making salting treatment decisions. A total of 120 observational sensors will be placed on the highway network. Phase 2 of the project will utilise in cab technology which automates the gritting process to ensure that only the critical areas of the primary network are salted and only with the correct volumes of salt. Evidence suggests that manual gritting generally oversupplies salt. This will be trialled during the 2019/20 winter season.
- 3.3 **Secondary routes** during the recent snow events no secondary routes were treated. In the main this was due to all available resources concentrating on keeping the primary routes open and keeping Kent moving. A review of secondary routes is ongoing to determine which parts of that network could be prioritised during a snow event and the impact that would have on budget and resource requirements. The

policy has been revised to reflect current working practice, that secondary routes will only be treated when

- i. all primary routes have been treated and can be kept open to traffic and
- ii. only if resources are available without impacting upon primary routes.
- 3.4 Farmers gritting trial There are 106 farmers contracted to clear 117 routes across the county. The farmers all have pre-arranged routes which they attend and clear when over 50mm of snow has accumulated on the road surface using snow ploughs provided and maintained by the KCC. All farmers were utilised during the snow events and many worked round the clock to keep rural areas as clear as possible. A bid has been made to the Kent Lane Rental Innovation Fund to pay for towable gritting equipment to enable a trial to be conducted in Maidstone and Sevenoaks. Several farmers will be provided with gritting equipment as well as snow ploughs for treating their routes and parts of the secondary routes identified as critical during the recent snow events. The results of the trial will feed into the secondary route review.
- 3.5 **Brine saturator procurement** We are also replacing our 6 brine saturators which provide a more effective application for the salt. Prewetting before salting reduces waste and provides opportunities to reduce the volume of salt without affecting performance. Utilising prewet operations is critical to meeting the available budget for winter service due to the increased costs if dry salt were to be used.

4. Winter resilience

- 4.1 We have identified an Operational Winter Period which is October to April 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.
- 4.2 The minimum levels of salt needed to maintain the resilient network (as defined in the Quarmby review 2012) are shown at Appendix A. We maintain a salt stock of 23,000 tonnes (including 2000 tonnes of a salt/grit mix which is held in a strategic stockpile at Faversham Highway depot) so we are within the recommended minimum levels. Arrangements are in place for deliveries to keep stocks topped up during winter.

5. Collaboration with neighbouring authorities

5.1 Mutual aid arrangements are in place with Highways England Area 4 and Medway Council

6. Media and communication

- 6.1 As in previous years a media campaign will be used during the winter season. A series of infographics have been prepared which gives information about the winter service in an engaging manner. These will feature in a range of media, including social media.
- 6.2 The campaign will increase awareness of the service and encourage everyone to be prepared and undertake self-help when possible. This year the media radio, television and press will be provided with media briefs in advance of the winter season detailing the essentials of the winter service.
- 6.3 Key staff in Highways are working with the press office to prepare 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. Winter Service Policy and Plan 2018/19

- 7.1 The Winter Service Policy is presented at Appendix B. The following additions have been made to this year's policy:
 - (s.5.5.4) Observational data from road weather sensors will be used to validate pre-salting decisions.
 - (s. 6.1.1) Secondary routes to be treated when all primary routes treated and resources available
 - (s. 6.4.2) Farmers trial to be expanded
- 7.2 The Winter Service Policy is supported by an Operational Plan which has seen updated in line with the Policy and discussions have taken place with our Highway Maintenance Service Provider to ensure that plans are aligned.
- 7.3 The Plan is available for Members to view on request. 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. Local district plans will be reported to the next round of Joint Transportation Boards.

8. Strategic Statement

8.1 Winter service is essential to "Keep Kent Moving" for social and economic development reasons. It also contributes towards Kent residents having a good quality of life in all weathers through local district winter plans, the provision of salt bins and the communication strategy that complements the winter service policy.

9. Equality Impact Assessment

9.1 An equality impact assessment (EQIA) is being carried out on the Policy and if any negative impacts are identified, action will be taken to mitigate or remove them. The EQIA undertaken last year did not identify any factors that required mitigation or changes to the Policy.

10. Conclusion

10.1 The Winter Service Policy sets out the Councils arrangements to deliver a winter service across Kent. Three revisions have been made as set out above and detailed in the recommendations below.

11. Recommendations

- 11.1 The Cabinet Committee is asked to note the proposed changes to the Winter Service Policy for 2018/19:
 - (s.5.5.4) Observational data from road weather sensors will be used to validate pre-salting decisions
 - (s. 6.1.1) Secondary routes to be treated when all primary routes treated and resources available
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12. Background documents

- Well Managed Highways 2016; Appendix H winter service guidance NWSRG: http://www.ukroadsliaisongroup.org/en/utilities/document-summary.cfm?docid=C7214A5B-66E1-4994-AA7FBAC360DC5CC7
- Appendix A: Minimum Salt Stock
- Appendix B: Winter Service Policy:

13. Contact details

Report Author:

Name: Carol Valentine

Title: **Highway Manager (West)**

Tel No: 03000 418141

Email: carol.valentine@kent.gov.uk

Head of Service:

Name: Andrew Loosemore

Title: **Head of Highways Asset Management**

Email: andrew.loosemore@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/36runs | Overall winter period Minimum Network(12 days/48 runs) | |
| Primary | 350 | 350 | 16,800 | 12,600 | 16,800 | |
| Total | | | 16,800 | 12,600 | 16,800 | |
| Actual Stock levels as @ 26 th October 2018 | | | 23,000 | | | |

Overall winter period – 26th October 2018 to 26th April 2019

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