

**From:** David Brazier, Cabinet Member Highways and Transport  
Simon Jones, Corporate Director, Growth, Environment and Transport.

**To:** Environment and Transport Cabinet Committee – 8 September

**Subject:** Winter Service Policy for 2021/22

**Classification:** Unrestricted

**Summary:** Each year officers review the Council's Winter Service Policy and the operational plan that supports it considering changes in national guidance and lessons learnt from the previous winter. This report sets out revisions to this year's policy.

**Recommendation:** The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways and Transport on the proposed decisions to agree changes to the Winter Service Policy for 2021/22 as set out in paragraph 8.1

## 1. Introduction

- 1.1 The 2020/21 winter was slightly colder than average with 76 primary salting routes completed compared with the budgeted 66 runs and 15,618 tonnes of salt used.
- 1.2 During the week of 18<sup>th</sup> January 2021, the county experienced widespread snow showers. Due to the Covid 19 pandemic, snow clearance was carried out in the vicinity of testing and vaccination centres and other key medical facilities. Additionally, dedicated gritters were assigned to treat sites associated with the EU exit.

## 2. Financial implications

- 2.1 The allocated budget for winter service for 2021/22 is £3,498,800 The budget is broken down as follows:

Pre-Salting Gritting Operation	1,365,100
Plant & Equipment	1,789,900
Snowex Machines	142,700
Maintenance Of Farmers Ploughs	50,000
Weather Forecasting	20,000
Ice Prediction	35,000
Supply & Maintain Salt Bins	81,100
Supply Of Salt To Districts	10,000
Publicity Campaign	5,000
<b>TOTAL</b>	<b>£3,498,800</b>

### **3. Winter planning**

3.1 Over the 2021 summer period work has been undertaken to further refine and improve the winter service; this focused on:

- Brine trial analysis
- Smart winter route optimisation
- Salt bin replacement and filling
- Creation of snow routes

#### **3.2 Brine trial**

3.2.1 Following a brine trial in 2019/20. analysis has now been undertaken of the trial data to gauge the friction performance of brine in comparison to traditional pre-wet treatment.

3.2.2 The bulk of the trial was conducted in moist to wet surface conditions and at a moderate temperature range of -2 to +2 degrees Celsius. The general outcome was that pre-wet marginally outperforms brine; however, the margin is enough to conclude that Brine is a viable substitute for pre-wet in the moderate conditions that predominate the Kent operation.

3.2.3 Brine's performance also did not degrade in either rainy or freezing conditions, further reflected in brine exhibiting more consistent friction over all conditions on the trial. A more controlled study is needed to account accurately for actual roadside observed weather conditions, but this consistency provides further positive indication as to its potential reliability as an alternative treatment.

#### **3.3 Smart Winter route optimisation**

3.3.1 During phase 2 of the Smart Winter Programme, Amey Strategic Consulting developed a machine learning model to predict road surface temperatures using sensor and contextual data. This model was used to define new gritting domains with more consistent temperature profiles, improving the effectiveness of gritting decisions made on domains during the past winter season. Work will be done in the next year to further optimise the existing winter routes within the new domains.

#### **3.4 Salt bins**

3.4.1 There are just over 3,000 salt bins in the county and this stock is considered sufficient to meet the needs of local communities. No new salt bins will be placed this winter. County Members can still use their Combined Member Fund to purchase salt bins.

3.4.2 Following last season's snow event, all reports received regarding empty and damaged salt bins were actioned. For this coming winter season, we will be utilising individual reports from the highways team and customer enquiries, to ensure salt bins are full. Salt bins will be filled once during the season, however in the event of a snow event they may be refilled, subject to available resources. We will continue to

monitor salt bin usage over the coming winter season to ensure bins are located where needed on the network.

#### **4. Snow routes**

- 4.1 The winter service is focused on keeping open the network of primary routes comprising 1,597 miles, (2,571 km) which are the main A and B roads and locally important roads in the county. During snow events these remain the focus of activity. However, it is recognised that other parts of the highway in the county are adversely affected by snow, and this can have a detrimental impact on communities relying on these roads to get to the main roads.
- 4.2 Whilst policy, service levels and resources enable us to meet our statutory duty we are mindful that other parts of the road network do experience particular difficulties. These include hilly areas, exposed roads subject to drifting and other factors. These have been designated snow routes and will be treated, as resources allow, when there is a snow event. These routes will be digitised and loaded into the in- cab Navtrak system. Additionally, we will continue to have the support of our contracted farmers who clear snow from pre-approved areas of the rural network.

#### **5. Winter resilience**

- 5.1 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.
- 5.2 The minimum levels of salt needed to maintain the resilient network (as defined in the Quarmby review 2012) is 16,800 tonnes. We maintain a salt stock of 23,000 tonnes (including 2,000 tonnes of a salt/grit mix which is held in a strategic stockpile at Faversham Highway depot) ensuring the recommended minimum levels are achieved.
- 5.3 Arrangements are in place for salt deliveries during the winter to ensure we have the recommended resilience stock levels. In addition, we also hold 5,000 tonnes as an operational contingency, in the event of an emergency being declared or if supplies nationally become restricted.
- 5.4 An early warning under the term maintenance contract has been raised by our service provider Amey concerning the national issue of a shortage of HGV drivers. This may impact on their ability to maintain driver levels. This is as stated an early warning and as yet there is no measurable impact. Amey senior management are in communications with their supply chain sub-contractors and support drivers in order to understand if there will be a resource issue. The recent announcement by some UK companies offering cash incentives for drivers to join their organisations does cause concern for this type of local resource and has the potential to increase costs for the service.

## **6. Collaboration with neighbouring authorities**

- 6.1 Mutual aid arrangements are in place with Highways England Area 4 and Medway Council. The annual winter meeting with all southeast highway authorities to finalise arrangements is scheduled for late September 2021.

## **7. Media and communication**

- 7.1 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.
- 7.2 The campaign will increase awareness of the service and encourage everyone to be prepared and undertake self-help when possible. This year radio, television and press will be provided with media briefs in advance of the winter season detailing the essentials of the winter service.
- 7.3 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.

## **8. Winter Service Policy and Plan 2021/22**

- 8.1 The Winter Service Policy is presented at Appendix B. The following additions have been made to this year's policy:
  - (8.1.1) Commencing 2021/22, a new set of snow routes for each district has been developed. These will be treated before or after snowfall as required and when resources are available.
  - (8.1.2) For this winter, salt bins will be filled in response to customer enquiries and monitored by highways staff throughout the season. This will ensure that resources are efficiently deployed to the bins that need to be filled. In the event of severe weather further refills will be carried out as time and resources permit.
- 8.2 The Winter Service Policy is supported by an Operational Plan which has been updated in line with the Policy and discussions have taken place with our Highway Maintenance Service Provider to ensure that plans are aligned.
- 8.3 The Plan is available for Members to view on request. In addition, district plans have been developed in conjunction with district and borough councils across the county and these will be used together with this revised Policy to deliver the winter service. Local district plans will be reported to the next round of Joint Transportation Boards.

## **9. Equality Impact Assessment**

- 9.1 An equality impact assessment (EQIA) has been carried out on the Policy.

## 10. Conclusion

10.1 The Winter Service Policy sets out the Council's arrangements to deliver a winter service across Kent. A few revisions have been made as set out above and detailed in paragraph 8.1

## 11. Recommendations

11.1 The Cabinet Committee is asked to consider and endorse, or make recommendations to the Cabinet Member for Highways and Transport on the proposed decisions to agree changes to the Winter Service Policy for 2021/22 as set out in paragraph 8.1

## 12. Background documents

12.1 Well Managed Highways 2016; NWSRG Best Practice Guidance -Planning Section - <http://www.ukroadsliaisongroup.org/en/codes/index.cfm>

### 12.2 Winter Service Policy:

<https://democracy.kent.gov.uk/documents/s105411/WinterServicePolicy202122.pdf>

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