



Briefing 08/28

May 2008

Local authority winter maintenance provision

This briefing provides a summary of responses to APSE queries issued regarding winter maintenance provision by local authorities. It is provided to local authority chief executives, council leaders, and all APSE highways and street lighting contacts.

Key Issues

- A summary of responses to 2 queries sent to the APSE network in relation to winter maintenance provision
- Factors causing variation in winter maintenance spread rates
- Methods of monitoring spread rates
- Driver only winter maintenance operations

1. Introduction

In December 2007, 2 queries were sent to all contacts in the highways and street lighting network regarding winter maintenance provision. There was a high level of response to the queries indicating a large amount of interest in these queries. The responses are summarised below.

2. Winter maintenance spread rates

One of the queries related to a local authority experiencing a problem with rates of spread when gritting. Significant variations in spread rates were being recorded from the same vehicle even after calibration. Feedback from the query suggested that the factors that might be causing this were as follows:

- Type/age of spreader and chassis
- Sticking/slipping conveyor belts or problems with spinners, particularly for older or worn equipment
- Methods of powering the spreader

- Salt condition; feedback suggested using covered agricultural by-product treated salt. Other comments included that untreated salt forms into lumps and a crust builds up and wet salt can be erratic and doesn't flow as well.
- Driver error; for example not using the spread rate that has been advised.

Advice offered from respondents included the following:

- Contact the supplier/manufacturer
- Use dry/covered salt
- Calibrate vehicles at the start of the season to ensure spread rates and distribution and make further checks if there is a problem.
- Driver training and refresher exercises at the start of every winter.

The query also asked for whether authorities monitor the actual spread rates as a matter of course and the responses to this included:

- Gather spreading information via a vehicle tracking system. However, one authority questioned the reliability of the data from this as their trials showed the figures to be 'highly unreliable'.
- Monitor actual usage against expected usage
- Monitoring usage against targets calculated from lengths gritted, width of spread and the defined spread rates
- Using a weighbridge
- Random visual checks and periodic site visits
- Monitoring if there is abnormal usage or damage to the vehicle

3. Driver only winter maintenance operations

The other query related to driver only winter maintenance operations and the mobilisation of additional operatives. The local authority wanted to find out about current practice with regards to driver only winter maintenance operations, forms of communication between vehicles and supervisors, the conditions where a second operative would be mobilised and whether there is a difference between daylight or night time working. In relation to current practice nearly all respondents operated some form of driver only operations and comments included:

- Precautionary gritting is carried out using driver only operation
- On category 1 and category 2 road treatment routes, which have been designed around driver only operation without the need for reversing manoeuvres
- A driver only operation is operated for all gritting routes except for when ploughs are fitted

Communication methods include the following:

- Mobile phones
- 2-way radios
- Vehicle tracker systems

One respondent said that operatives have to contact a supervisor if they have to leave the vehicle for any reason including checking salt levels.

The conditions where a second operative would be mobilised are as follows:

- The use of ploughs

- Severe adverse conditions or a forecasted risk
- Training purposes (although this would only occur in exceptional circumstances since driver training is carried out pre-season to permit driver only operations)

90% of respondents stated that there was no difference between daylight and night working. One respondent stated that outside normal hours (07:30 to 16:00 Monday to Friday) only category 1 routes are treated during freezing conditions. All available resources are employed on the removal and treatment of snow for as long as the snow conditions prevail.

4. Further information

If you would like to receive a copy of the full responses to the above queries or would like to send out another query to the APSE network, please contact Debbie Johns at the APSE office, djohns@apse.org.uk

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