

# Winter Maintenance Update

**Date:** 12<sup>th</sup> December 2018

**Item:** London's Winter Resilience Capability

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## 1 Purpose

- 1.1 This paper describes London's capability (TfL and the 33 London Boroughs) to maintain the London Resilience Network (LRN) during prolonged periods of ice and snow.
- 1.2 The LRN network maps can be found on the London Technical Advisors Group (LoTAG) website via the following link:

<https://www.lotag.co.uk/winter-resilience-network-maps>

## 2 Background

- 2.1 Following the severe winters and heavy snowfall in 2009 and 2010 the Government commissioned a review of the resilience of England's transport systems in winter. This review and its findings by David Quarmby CBE has defined industry best practice for salt stock resilience and states that highway authorities should maintain supplies for up to 12 days continuous treatment of its routes.
- 2.2 At the same time a London Resilience Network (LRN) was established - comprising the key routes which needed to remain available throughout severe weather conditions for both TfL and the boroughs. The LRN includes the full length of the Transport for London Road Network (TLRN), which makes up about 25% of the total LRN. The 12 days stated in the Quarmby report equates to a stock of 42,000 tonnes of salt for the LRN, of which 10,400 tonnes is for the Transport for London Road Network (TLRN).
- 2.3 After 2009/2010, the Local Authorities Panel (LAP), which includes the London Technical Advisors Group (LoTAG) and TfL, recommended that an additional two weeks (above the 12 days stated in the Quarmby report) of salt should be kept in reserve for the LRN as an acceptable level of resilience. This equates to an additional 49,000 tonnes, which when added to industry best practice amount gives a total of 91,000 tonnes.
- 2.4 It was agreed by LoTAG that London, through TfL, would hold a strategic salt stockpile. It was considered this would place the city in a better position to keep Londoners moving safely in prolonged and extreme winter conditions.

### **3 Strategic Salt Stock**

- 3.1 The salt strategy for London has been reviewed, in particular the viability of maintaining a strategic salt stockpile for London given:
- the strategic salt stock, which added on top of salt stocks already held in London, vastly exceeds government recommendations and industry good practice of 12 days, and this is providing a gold plated service which is costing Londoners;
  - the on-going costs of maintaining the strategic salt stock (circa £3m plus), including constructing a salt barn, property rental and maintenance, salt maintenance (turning), restocking salt that is “washed away” and security;
  - the notice to vacate the site where the strategic salt stock is currently held by December 2017 - this drives the requirement for the investment of £1m plus to build a new salt barn;
  - no salt from the strategic stock has been used since its creation in 2010; and
  - the financial challenges faced by TfL.
- 3.2 As the salt stock levels for both the LRN and TLRN exceed industry best practice, a briefing note was submitted to City Hall in October 2017 to cease holding a strategic salt stockpile. The alternative, and more cost effective, proposal was for TfL and boroughs to using existing salt storage facilities to ensure London as a whole has sufficient resilience for the LRN. The proposals included working with boroughs to ensure all were aware of their requirements.
- 3.3 TfL’s request to cease holding of the strategic salt stockpile was approved and the storage facility was decommissioned in February 2018.

### **4 London’s Resilience Status**

- 4.1 The government commissioned review detailed in paragraph 2.1 recommends a benchmark salt stock of 48 runs which is equivalent 12 days’ resilience or four runs per day.
- 4.2 The total area for LRN had been determined by assuming an average carriageway width of 10m; this is believed to be a conservative estimate.
- 4.3 Based on a spreading rate of 20g/m<sup>2</sup> as defined in the Winter Service Guidance for Local Authority Practitioners the minimum recommended salt stock provisions for London is 44,380 tonnes.
- 4.4 Storage capacity figures provided to TfL indicate a total potential capacity of 92,930 tonnes.

- 4.5 Excess capacity across the London Boroughs and TfL is 48,895 tonnes of which 85% of boroughs currently hold more than their minimum resilience requirement.
- 4.6 Assuming salt stocks are maintained in the region of 60% to 100% capacity, then London can hold sufficient salt to maintain an additional 8 to 13 days of resilience for the LRN above the recommended 12 days of resilience, 20 to 25 days in total respectively.

## **5 Recommendations**

- 5.1 Through the Winter Service Practitioners Group (WSPG) TfL and the London Boroughs will:
- define requirements around maintaining sufficient levels of salt to ensure resilience on the LRN over and above their capacity required to maintain a winter service on their local routes; and
  - agree protocols and mechanisms for sharing salt between authorities.
- 5.2 It is the intention of the WSPG to review the current LRN during the financial year of 2019/20.