

DLR Winter Service Plan

**Municipal Services
Road Maintenance
Section**

**For the period
October 2022 to
April 2023**



Purpose and Scope

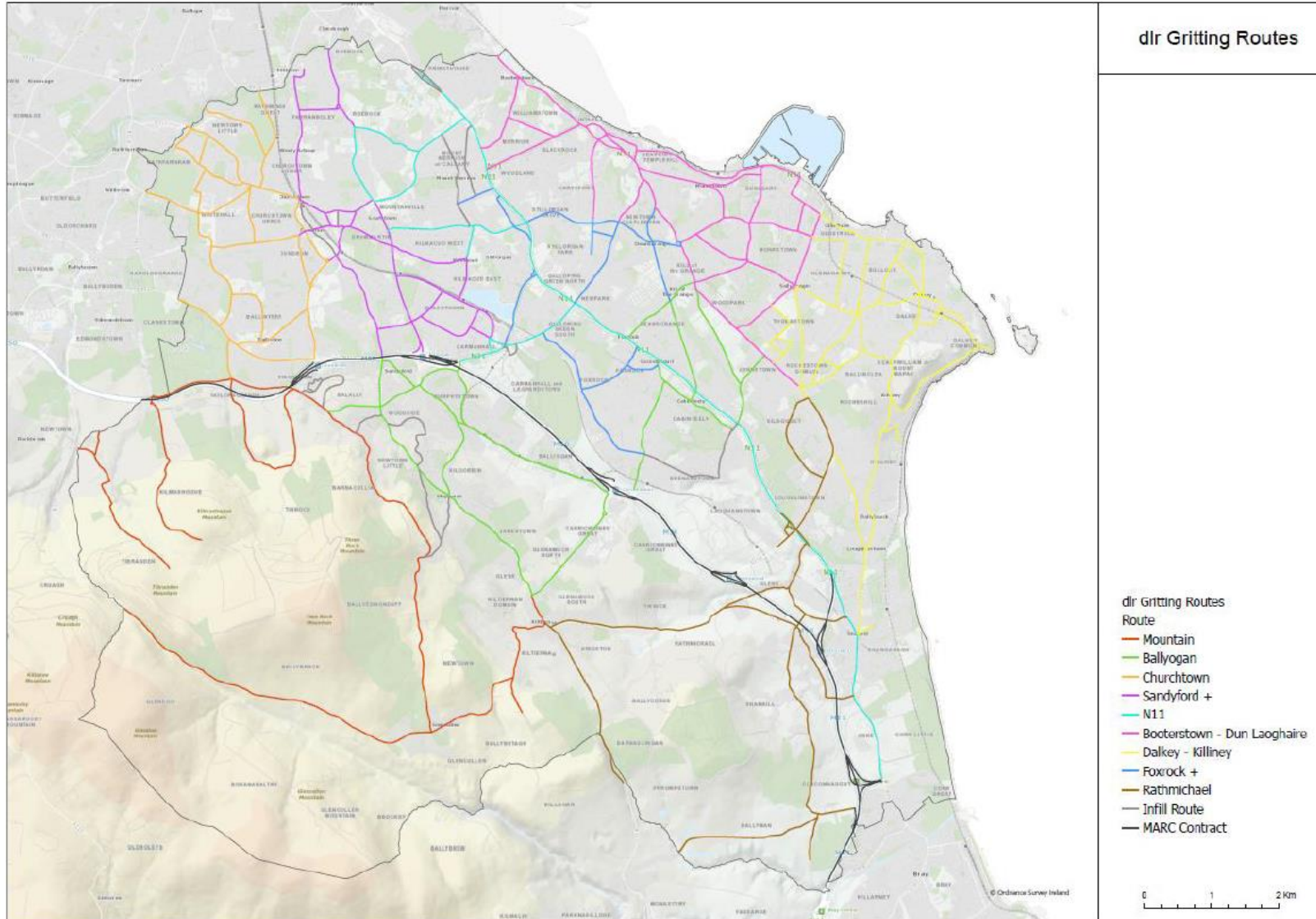
- DLR is responsible for 16km of National Primary and Secondary Roads, 113km of Regional Roads and 647km of Local Primary, Secondary & Tertiary Roads.
- Motorway (M11 and M50) gritting is carried out by motorway contractors on behalf of Transport Infrastructure Ireland (TII).
- Winter maintenance is confined to National Primary (NP) and National Secondary (NS) Routes, Regional routes and 151km of Local roads. The percentages are summarized below:

	Gritted Km	Total Km	%
NP & NS	16	16	100%
Regional	113	113	100%
Local	151	647	23%

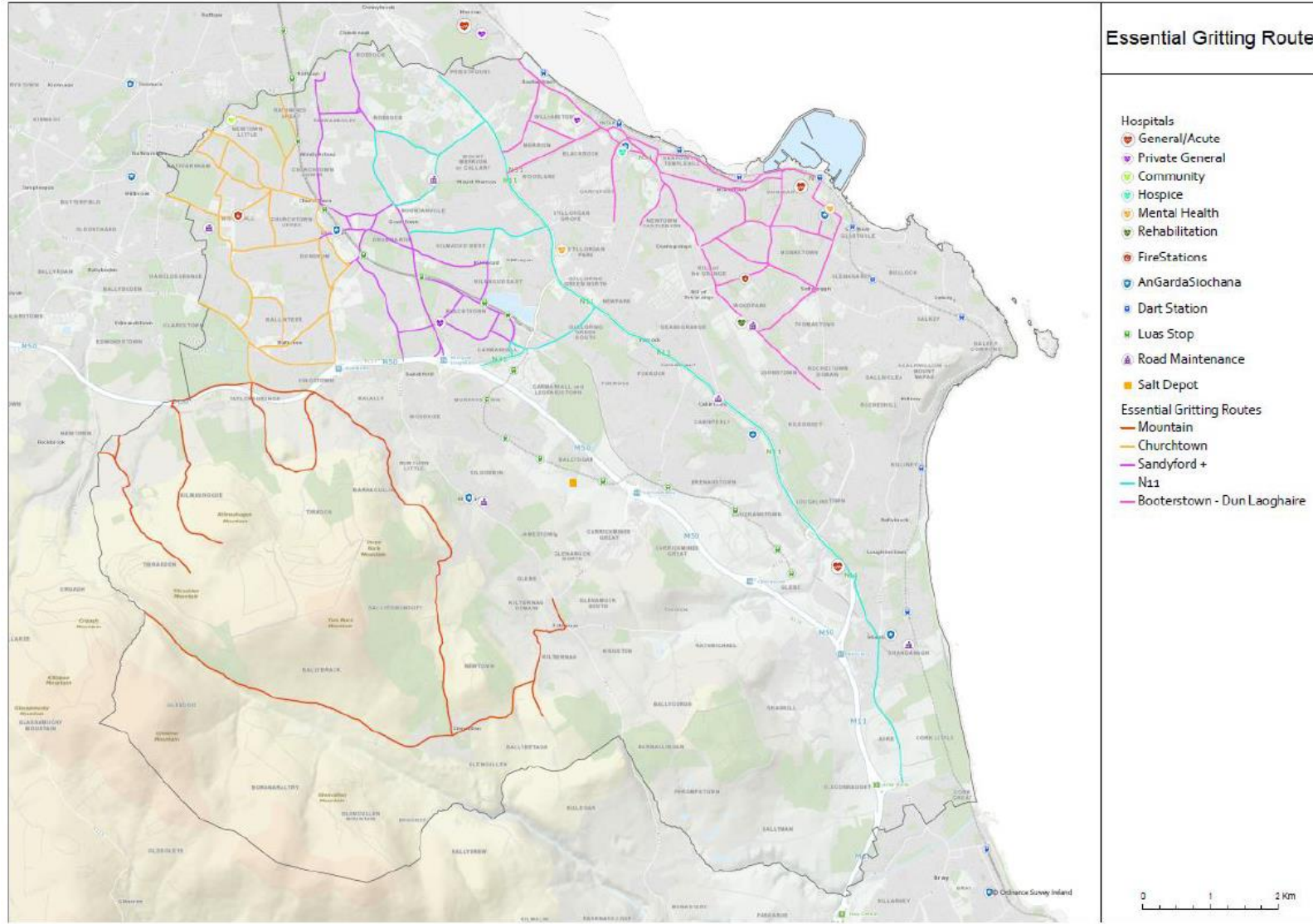
Precautionary Gritting

- DLR endeavour, within the limitations of the available resources, to keep the major traffic routes in a passable condition
- Winter gritting operation does not guarantee that a gritted/salted road is free of frost / ice / snow hazards. *It is incumbent on all drivers to adjust their driving style to account for the road and prevailing weather or other environmental conditions.*
- DLR spreads salt/grit on these roads before frost, ice or snow is expected (called 'precautionary gritting'), this operation of pre-salting is timed, where practicable, to be completed before the onset of snowfall or freezing conditions.
- Each route should take approximately 2 hours to complete gritting during a normal gritting operation (i.e. no snow). Gritting generally takes place at 7pm and / or 5am, although this can change if the weather conditions dictate.

Winter Gritting Map



Essential Gritting Routes



Emergency Scenarios

- Other resources within the Council's control may be employed where possible to clear footways at strategic points within the County and access routes to schools, DART, LUAS, bus stops etc.
- The public and business communities may, in such severe weather events, also clear outside their own properties. There is very useful public information available on national 'Winter Ready' website (www.winterready.ie).
- During normal working hours, the Council can be contacted through the Civic Hub via telephone on 01 2054700 and via email at info@dlrcoco.ie.
- DLR operates an after-hours call service. In emergency situations the Council may be contacted via its Pageboy facility.

Provision of Salt Boxes

- Salt boxes have been provided in certain rural locations for use by residents. Generally, Road Maintenance does not provide salt boxes in estates for the following reasons:
 - It is not recommended to apply salt to concrete footpaths as it is corrosive and causes severe damage to them.
 - This can lead to substantial reinstatement costs and personal injury claims.
 - Salt also damages certain types of flooring.
 - Resources requirements to keep boxes filled

Salt Box Locations				
Boranaraltry Lane	Brockery Lane	Fiery Lane	Devil's Elbow	Kilmashogue Lane
Tibradden Lane	Ticknock Rd	Bearna Way	Kilgobbin Rd	Assumpta Park
Barnaslingan Lane	Corke Abbey	Woodbrook Glen	John Keane's Lane	Kingston Estate
Kiltiernan National School	Glencullen National School			

Cycle Track Gritting

- In general, on-road cycle tracks within gritting routes will receive ample spread during the gritting operation
- Segregated cycle lanes require a separate treatment. The NTA funded two mini gritters for DLR to facilitate trial of winter gritting activities on sections of the segregated cycle network.
- Dedicated gritting of cycle tracks is not standard practice and to do so on a widespread basis would necessitate additional budgetary and resource provision



Road Weather Information System

- The road condition forecasting system is provided by Vaisala
- Vaisala receives daily forecasts from Met Eireann, which are specifically detailed for Local Authorities and other agencies.
- Forecasts are applied to local road conditions, and the results are provided to the Council’s Duty Engineers, via a map of the minimum expected road surface temperature and other weather data.
- The forecasting system polls the weather stations on the network at maximum intervals of one hour.
- The weather stations in the DLR area are located at the M50 (Sandyford ‘Master’), Ticknock, (Sandyford ‘Slave’), and the M11 (Wilford interchange).

Dun Laoghaire Rathdown County Council

24 Hour Area Forecast for region3

Counties: Dublin, Louth

Issue Time 21st of November 2022 at 14:42 UTC

Forecaster Commentary: Assessment of Site-Specific Data

A cold night with RSTs dropping near freezing overnight. A few isolated showers may complicate things, monitoring advised.

Readiness Colour

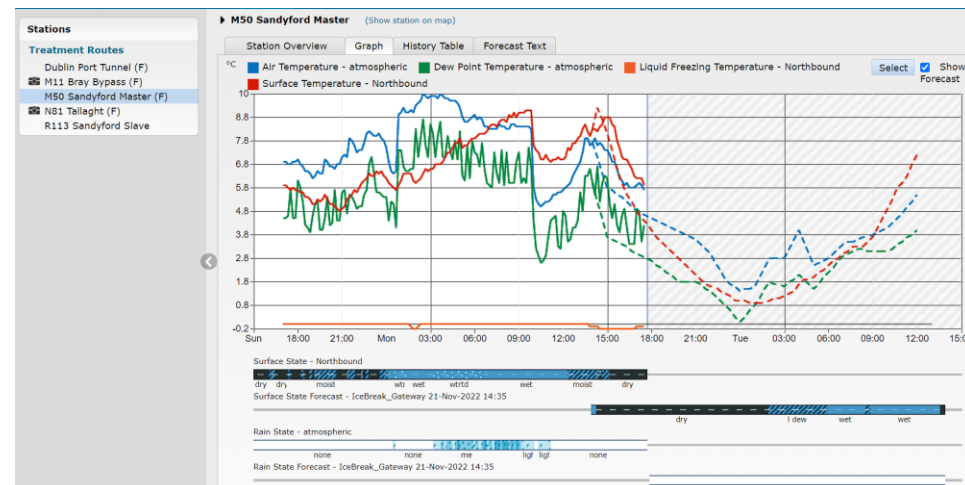
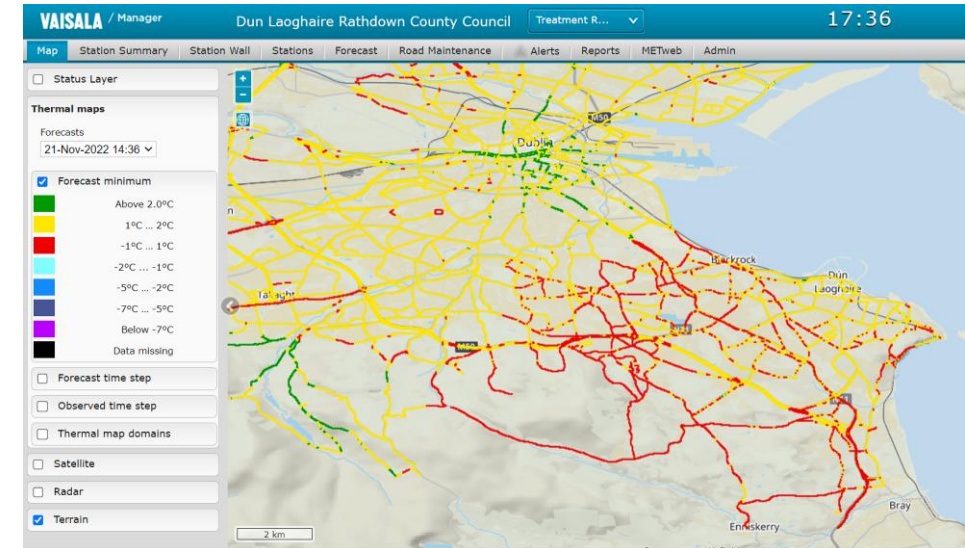
YELLOW

Hazard Summary

Element	Y/N	Confidence	Details
Ice	N	M	Ice is unlikely but cannot be ruled out locally with some showers possible.
Hoar Frost	Y	M	Chance of frost developing.
Snow	N	H	
Hail	N	H	
Fog	N	H	
Strong Wind	N	H	
Rain	Y	L	Isolated showers possible

Road Weather Information System

- Predictions developed from weather station data are extrapolated to all other areas using thermal mapping.
- Access to the Vaisala website is available to all the Duty Engineers
- Duty Engineers assess the forecast information and then advise the relevant personnel, via email and SMS messaging.
- Duty Engineers may call out the gritting crews to one or more gritting areas, if the temperature predictions fall below -1°C and frost is likely in those areas. The call-out decision will be made having considered the forecast, prevailing road conditions (e.g. wet, dry, or residual salt), and local information



Gritting Process

- The Duty Engineer will have authority to instruct treatment as required across the the county
- The Duty Engineer checks the Vaisala website and weather forecast before 2.30pm each day. In the event of the forecast of ice conditions, the Duty Engineer notifies the Inspectors of routes to be pre-salted and time of commencement.
- The Inspector then notifies the drivers and the Machinery Yard Foreman
- The drivers proceed to their parking depots and fit the salt spreaders at the appropriate time.
- The Inspector notifies the loader driver, proceeds to the Ballyogan salt depot at the appointed time and prepares the depot for loading of salt.
- At the designated time, the drivers will collect their machines, load salt and pre-salt their prearranged routes

Precautionary Spread Rates

- For frost and road surface temperatures at or above -2°C salts shall be spread at 10-15 g/m² dependent on local conditions and the immediate forecast.
- If freezing conditions are expected after rain or frost and the road surface temperature is below -2°C spread rates will be increased to 15-30g/m², according to the amount of moisture present and the temperature expected.
- If continuous snow is forecast, salt shall be spread at 30-40g/m² according to the anticipated severity of the snowfall.

<i>WEATHER CONDITIONS</i>	<i>DEFINITION</i>	<i>SALT SPREAD RATE (GRAM/SQUARE METRE)</i>
LIGHT	Frost and/or light snow	10 to 15
MODERATE	Freezing conditions after rain	15 to 30
SEVERE	Continuous snow	30 to 40

After Precautionary Treatment

- **Snow on road after precautionary treatment:**
 - Snow ploughing commences on major routes as directed by the Duty Engineer.
 - Each pass of the plough shall be supplemented by an application of salt
 - Special salting may be necessary to deal with melted water from snow, which may freeze at night, and roads will be monitored for such conditions.
- **Treatment of Hard-Packed Snow and Ice:**
 - If the previous procedures are carried out successfully then the formation of hard-packed snow should be prevented.
 - Where hard-packed snow and ice occurs and provided that the ice is no more than 20mm thick and the air temperature is below -5°C , then removal shall be carried out by successive salt applications of 20-40g/m².

DLR Winter Service Plan

Thank You

Questions?