



APSE WINTER CONFERENCE 2020

CAROL
VALENTINE



NWSRG

NATIONAL WINTER SERVICE RESEARCH GROUP

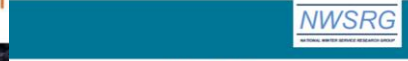


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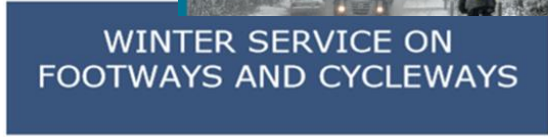
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SECTION SEVEN WINTER SERVICE DECISION MAKING



SECTION TWO PLANNING FOR WINTER SERVICE DELIVERY



WINTER SERVICE ON FOOTWAYS AND CYCLEWAYS



Key check list:

Weather Forecasting and Road
Weather Information Systems



AGENDA

- Planning
- Decision Making
- Footways and Cycleways
- Road Weather Information Systems
- What's new in the NWSRG?

THE NATIONAL WINTER SERVICE RESEARCH GROUP

Section	V1 Published date	V2 Published date	Status
1 - Foreword and Using the Guide	29/11/2010		Being reviewed
2 - Planning	-	18/05/2020	Complete
3 - De-Icer Types	-	(19/03/2019)	
4 - Salt Storage	29/11/2010	19/03/2019	Complete
5 - Treatment Methods and Technologies	-	19/03/2019	Complete
6 - Spreader Management	02/12/2010	19/03/2019	Complete
7 - Winter Service Decision Making	-		Approved by UKRB (Oct20). Now with UKRLG for Approval
8 - Spread Rates for Precautionary Treatment	06/12/2010	19/03/2019	Complete
9 - Treatments for Snow and Ice	25/01/2011	19/03/2019	Complete
10 - Treatments for Extreme Cold	31/01/2012	19/03/2019	Complete
11 - Winter Service Treatment of Footways and Cycleways	-		With SG for Approval
12 - Weather Forecasting and Road Weather Information Systems	-	14/09/2020	Complete
13 - Route Selection and Optimisation	-		Approved by UKRB (Oct20). Now with UKRLG for Approval



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SECTION TWO
PLANNING FOR WINTER
SERVICE DELIVERY



PLANNING



PLANNING

Statutory duty – Highways Act
1980 Section 41 (1A) etc.

Best Practice Guidance – Well
Managed Highways Infrastructure

NWSRG practical guidance
for Winter Service

Local Policy

Operational Planning

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SECTION TWO PLANNING FOR WINTER SERVICE DELIVERY



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SECTION SEVEN
WINTER SERVICE DECISION MAKING



DECISION MAKING



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DECISION MAKING

Section 7

- Training and experience
- Relevant pre-determined factors
- Overall scope of treatment decisions
- Considering the weather forecast
- Other factors to be taken into consideration
- The decision

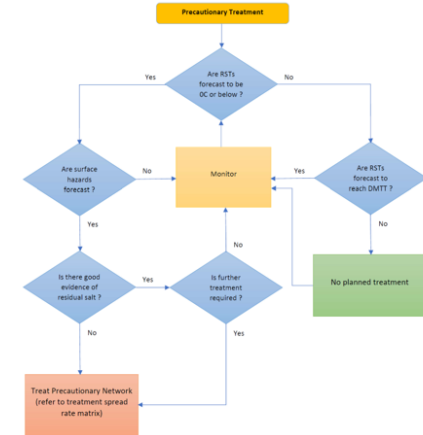
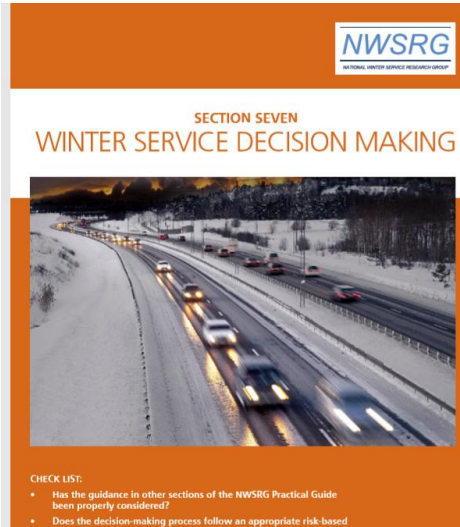


Figure 7.1 – Example Precautionary Treatment Decision Making Flow Chart

WINTER SERVICE ON FOOTWAYS AND CYCLEWAYS



Key check list:

- Have footways and cycleways been selected and prioritised for treatment in accordance with a risk based approach?
- Has consideration been given to footway and cycleways when specifying weather forecast requirements, location of weather stations and sensors?
- Has the footways and cycleways Winter Service delivery policy been clearly communicated to all relevant stakeholders?

FOOTWAYS AND CYLCLEWAYS



FOOTWAYS AND CYCLEWAYS

Section 11

- BENEFITS OF TREATING FOOTWAYS AND CYCLEWAYS
- THE PRIORITISATION OF FOOTWAY AND CYCLEWAY TREATMENT ROUTES
- ROUTE SELECTION
- RESILIENCE NETWORK
- BENEFITS OF PRECAUTIONARY TREATMENTS
- THE USE OF WEATHER FORECASTS TO INFORM TREATMENT DECISIONS

WINTER SERVICE ON FOOTWAYS AND CYCLEWAYS



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FOOTWAYS AND CYCLEWAYS

Section 11

- THE USE OF ROAD WEATHER STATIONS AND SENSORS
- TYPES OF DE-ICER AND SPREADING EQUIPMENT
- FACTORS TO CONSIDER WHEN SELECTING DE-ICERS AND SPREADING EQUIPMENT
- SPREAD RATES AND TREATMENT GUIDELINES
- ADDITIONAL RESOURCE FOR WINTER SERVICE

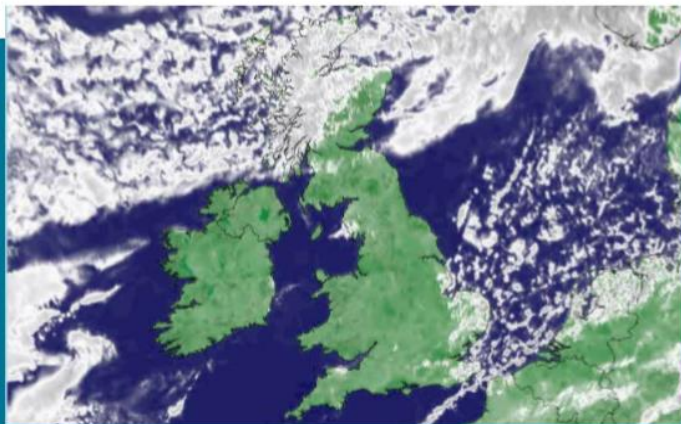
WINTER SERVICE ON FOOTWAYS AND CYCLEWAYS



Key check list:



SECTION TWELVE WEATHER FORECASTING AND ROAD WEATHER INFORMATION SYSTEMS



KEY CHECK LIST:

- Have decision makers undergone suitable training (such as the IHE/NWSRG Winter Service Decision Makers Course and/or other training provided by forecast providers and sensor suppliers)
- Are the most appropriate weather forecasting services being procured?
- Have the potential benefits of increasing the granularity/resolution of forecasts been considered – i.e. domain or route-based forecasts?
- Are conditions being monitored appropriately throughout the forecasting period?

In association with IHE

ROAD WEATHER INFORMATION SYSTEMS

ROAD WEATHER INFORMATION SYSTEMS

TYPES OF ROAD FORECASTING SERVICE

FORECAST RANGES

FORECAST COMPONENTS

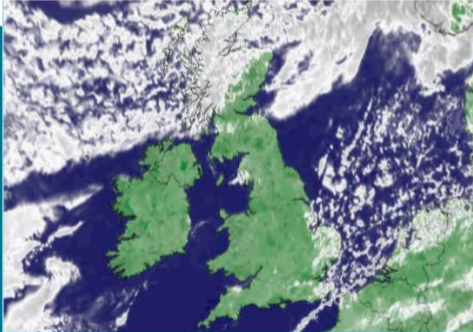
MONITORING FORECAST PERFORMANCE AND ACCURACY

ROAD WEATHER STATIONS

EMERGING TRENDS AND TECHNOLOGIES

NATIONAL WINTER SERVICE RESEARCH GROUP


SECTION TWELVE WEATHER FORECASTING AND ROAD WEATHER INFORMATION SYSTEMS



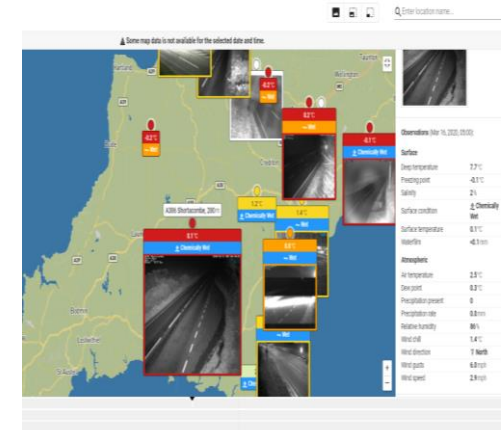
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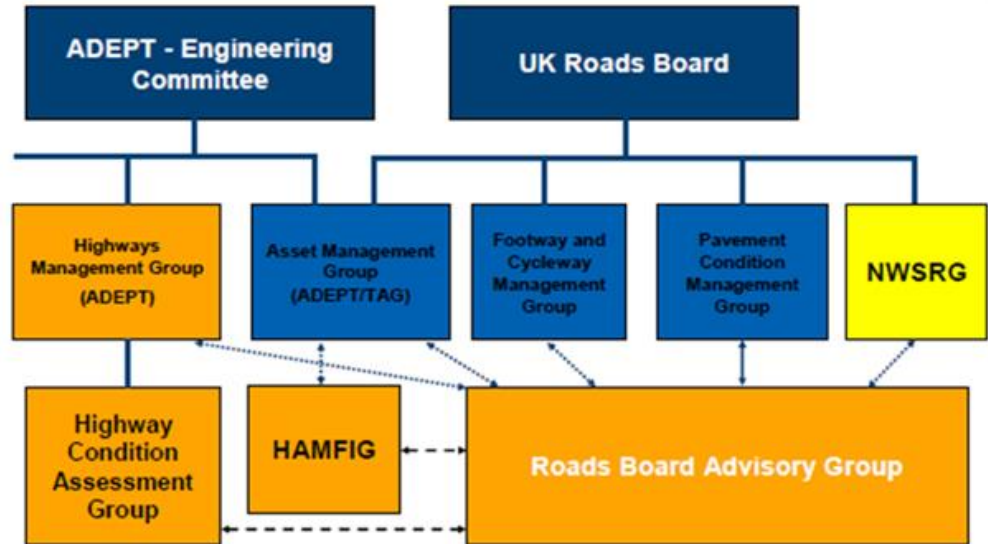
www.nwsrg.org



WHAT'S NEW IN THE NWSRG?

- Membership based organisation
- Funded by members - local and national highway authorities
- Funded by Technical Advisory members
- Supported by the Winter Service Industry
- Steering Group reports to UK Roads Board
- IHE – Service level agreement in place
- New Constitution in place
- TRL contract ended, opportunity to work with new consultants
- New website in development

UK Roads Board (UKRB) & Association of Directors of Environment, Planning and Transport (ADEPT) Structure Liaison Chart





THANKYOU

