

**This is Document “Schedule 7 Part 2” referred to in this Contract**

**SCOTTISH MINISTERS’ REQUIREMENTS**

**SCHEDULE 7 PART 2**

**WINTER SERVICE**

**CONTENTS**

	<b>Page No</b>
<b>1 WINTER SERVICE GENERAL</b>	<b>1</b>
1.1 General	1
1.2 Winter Service Plan	1
1.3 Winter Service Reports	2
<b>2 WINTER SERVICE MANAGEMENT</b>	<b>3</b>
2.1 Equipment and Services	3
2.2 Thermal Maps and Road Sensors	4
2.3 Winter Service Duty Officer	4
2.4 Decision Making Processes	4
2.5 Liaison and Communication	5
2.6 Winter Service Patrols	6
2.7 Areas Requiring Special Attention	7
2.8 Road Closures	7
2.9 Snow Fences and Shelter Belts	8
2.10 Snow Poles	8
2.11 Salt Bins and Self Help Salt Heaps	8
2.12 Snow and Ice and Hidden Message Signs	8
2.13 Records	9
<b>3 WINTER SERVICE TREATMENTS</b>	<b>9</b>
3.1 Precautionary Treatment	9
3.2 Pre-Wetted Salt Treatment	9
3.3 Response Times	9
<b>ANNEX 7.2/A – WINTER SERVICE PLAN</b>	<b>11</b>
<b>1 MANAGEMENT ARRANGEMENTS</b>	<b>13</b>
1.1 Winter Service Manager	13
1.2 Winter Service Duty Officers	13
1.3 Monitoring Arrangements	13
1.4 Personnel Resources	13
1.5 Call out arrangements	13
1.6 Communications equipment	13
1.7 Training for Managers and Other Staff	13
<b>2 WEATHER FORECASTING</b>	<b>14</b>
2.1 Purpose	14
2.2 Methodology	14
2.3 Weather forecasting service	14
2.4 Computer Systems	14
<b>3 MONITORING ARRANGEMENTS FOR AREAS REQUIRING SPECIAL ATTENTION</b>	<b>14</b>
<b>4 DECISION MAKING</b>	<b>14</b>

4.1	Role of the Winter Service Manager	14
4.2	Role of the Winter Service Duty Officer	14
<b>5</b>	<b>LIAISON</b>	<b>14</b>
5.1	Liaison with	14
<b>6</b>	<b>WINTER SERVICE PATROLS</b>	<b>15</b>
6.1	Winter Constructional Plant and Reporting	15
<b>7</b>	<b>PRECAUTIONARY TREATMENT ROUTES</b>	<b>15</b>
7.1	Precautionary Treatment Routes	15
<b>8</b>	<b>SNOW AND ICE CLEARANCE</b>	<b>15</b>
8.1	Snow Clearing	15
<b>9</b>	<b>DE-ICING MATERIALS</b>	<b>15</b>
9.1	Type	15
9.2	Specification	15
9.3	Storage and testing methods	15
9.4	Suppliers	15
9.5	Stock levels	15
<b>10</b>	<b>WINTER CONSTRUCTIONAL PLANT</b>	<b>16</b>
10.1	Front Line Winter Constructional Plant	16
10.2	Reserve Winter Constructional Plant	16
10.3	Additional Winter Constructional Plant	17
10.4	Loading Winter Constructional Plant	17
10.5	Calibration of Constructional Plant	17
<b>11</b>	<b>PLANS</b>	<b>17</b>
11.1	Precautionary treatment routes for carriageways	17
11.2	Precautionary treatment routes for footways footbridges and cycleways	17
11.3	Winter Service Patrol routes	17
<b>12</b>	<b>COMPILING AND MAINTAINING RECORDS</b>	<b>18</b>
<b>13</b>	<b>SNOW POLES</b>	<b>18</b>
<b>14</b>	<b>SNOW GATES</b>	<b>18</b>
<b>15</b>	<b>VARIABLE MESSAGE SNOW ICE AND HIDDEN MESSAGE SIGNS</b>	<b>18</b>
15.1	Operating and liaison procedures	18
<b>16</b>	<b>SALT BINS AND SELF HELP SALT HEAPS</b>	<b>18</b>
16.1	Stock level monitoring and replenishment procedures	18
<b>17</b>	<b>SALT MEASUREMENT APPARATUS</b>	<b>18</b>
17.1	Details of equipment and locations and recording methods	18
<b>ANNEX 7.2/B – WINTER SERVICE REPORT</b>		<b>19</b>
<b>ANNEX 7.2/C – WINTER SERVICE PATROLS</b>		<b>23</b>
<b>ANNEX 7.2/D – LOCATIONS OF SITES FOR DE-ICING TREATMENT FOR CATEGORY A B AND C FOOTWAYS FOOTBRIDGES AND CYCLEWAYS</b>		<b>27</b>
<b>ANNEX 7.2/E – LOCATIONS OF AREAS REQUIRING SPECIAL ATTENTION</b>		<b>33</b>

<b>ANNEX 7.2/F – LOCATION DETAILS</b>	<b>37</b>
<b>ANNEX 7.2/G – RECORDS</b>	<b>41</b>
<b>ANNEX 7.2/H – ETHYLENE GLYCOL TREATMENT</b>	<b>45</b>
<b>ANNEX 7.2/I – WINTER SERVICE PLAN APPENDICES</b>	<b>49</b>

***This page is blank***

## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

#### **1 WINTER SERVICE GENERAL**

##### **1.1 General**

###### **1.1.1 Purpose**

Winter Service Operations shall allow the safe movement of users of Trunk Roads and shall minimise delays and disruption to users caused by snow and ice conditions.

The incidence and severity of winter conditions varies considerably throughout the seasons and from year to year and the resource requirement can fluctuate widely.

The general requirement shall be for the Operating Company to deliver a level of Winter Service to deal with the winter conditions normally associated with the Unit with the facility to provide such resources as shall be required to deal effectively with all winter weather conditions which can be expected to arise.

###### **1.1.2 Outwith the Winter Service Period**

If winter conditions occur outwith the Winter Service Period the Operating Company shall provide and maintain the Winter Service in accordance with this Part 2 of this Schedule 7.

###### **1.1.3 Winter Service publicity**

The Operating Company shall assist the Director in the preparation of an annual Winter Service publicity leaflet and carry out its distribution to

- (i) garages
  - (ii) libraries and
  - (iii) other public and private distribution outlets
- within the geographical area of the Unit.

##### **1.2 Winter Service Plan**

###### **1.2.1 The Winter Service Plan shall be the Operating Company's proposals for delivering the Winter Service to meet**

- (i) the Statutory Function with respect to snow and ice as required by paragraph 5 (iii) of Annex 3.9/A of Part 9 of Schedule 3 and
- (ii) the requirements of this Part 2 of this Schedule 7 and Series 2800 of Part 1 of Schedule 9.

###### **1.2.2 The Winter Service Plan shall be prepared by the Operating Company in accordance with the structure in Annex 7.2/A to this Part 2 of Schedule 7.**

###### **1.2.3 This Part 2 of this Schedule 7 identifies issues to be addressed by the Operating Company in the preparation of each annual Winter Service Plan.**

- 1.2.4 In preparing the Winter Service Plan the Operating Company shall consult with the
- (i) emergency services
  - (ii) adjacent local authorities and their agents
  - (iii) adjacent Trunk Road operating companies and
  - (iv) other interested parties.
- 1.2.5 The Operating Company shall prepare a Winter Service Plan which meets the requirements referred to in Annex 7.2/A to this Part 2 of this Schedule 7 for the period between the commencement of the First Annual Period and midnight on 15 May in the First Annual Period.
- The Winter Service Plan for this period shall be submitted for written consent to the Director not later than 90 days prior to the end of the Mobilisation Period.
- 1.2.6 Prior to 31st July of each Annual Period thereafter consultation with the
- (i) emergency services
  - (ii) adjacent local authorities and their agents
  - (iii) other Trunk Road operating companies and
  - (iv) other interested parties
- a Winter Service Plan for the forthcoming Winter Service Period shall be formulated by the Operating Company and submitted for written consent to the Director .
- 1.2.7 When consented to by the Director the Winter Service Plan shall be incorporated into the Operating Company's Quality Management System including the Quality Plan..
- 1.2.8 Prior to the commencement of the forthcoming Winter Service Period the Operating Company shall provide one controlled paper and one controlled Electronic Copy of the Winter Service Plan to
- (i) the Director
  - (ii) the Performance Audit Group
  - (iii) the emergency services
  - (iv) adjacent local authorities and their agents
  - (v) other Trunk Road operating companies and
  - (vi) other interested parties.
- 1.3 Winter Service Reports**
- 1.3.1 The Winter Service Report shall be an annual review by the Operating Company of the Winter Service and Operations for the previous Winter Service Period and shall help to inform the Director and the Operating Company as to the requirements for the next Winter Service Plan.
- 1.3.2 The Winter Service Report shall be prepared annually by the Operating Company in accordance with the structure as referred to in Annex 7.2/B to this Part 2 of this Schedule 7.

1.3.3 Submission dates

1.3.3.1 Prior to 31 May of the First Annual Period the Operating Company shall prepare a Winter Service Report and submit it to the Director for the Winter Service Period ending 15 May in the First Annual Period.

This shall include a report on the Winter Service provided by the previous Trunk Road operating company up to midnight on 31 March prior to the commencement of the first Annual period.

The Operating Company shall obtain from the Director the winter maintenance plan prepared by the previous Trunk Road operating company.

On the 31<sup>st</sup> of March prior to the commencement of the First Annual Period the Operating Company shall obtain details of the Winter Service provided by the previous Trunk Road operator to assist in the preparation of the Winter Service Report.

1.3.3.2 Prior to 31 May during the Second Annual Period and all subsequent Annual Periods the Operating Company shall prepare the Winter Service Report on the Operations including management for each Winter Service Period and submit it to the Director.

1.3.3.3 An annual review meeting between the Operating Company and the Director shall take place 14 days after the annual Winter Service Report shall have been submitted to the Director to consider the finding of the Winter Service Report.

**2 WINTER SERVICE MANAGEMENT**

**2.1 Equipment and Services**

2.1.1 The Operating Company shall provide the following to assist with its decision making process

- (i) an expert weather forecasting service as shall be required in paragraphs 1.1.1 to 1.1.4 of Part 9 of Schedule 7.
- (ii) a computerised road weather information system including hardware software and telecommunication links required to obtain interpret and display as a minimum
  - (a) road sensor data (forecast and actual)
  - (b) thermal maps
  - (c) weather data and
  - (d) the likein a manner which shall also predict trends in weather and road conditions.
- (iii) the computerised road weather information system shall be accessible to the expert weather forecasting service provider and shall be able to accept additional road sensors to those listed in Annex 7.2/F of this Part 2 of this Schedule 7.

The Operating Company shall be responsible for the provision of everything within the said system with the exception of road sensors and thermal maps.

The said system proposed by the Operating Company shall be consented to in writing by the Director 60 days prior to the end of the Mobilisation Period.

The Director shall require a minimum of 14 days notice to allow him to consider and issue his consent.

- (iv) suitable computer terminals and software for the display of weather related radar information from a meteorological service provider consented to in writing by the Director.

Such information shall be accessible at all times during the Winter Service Period to the Operating Company to assist in the Winter Service decision making process.

## **2.2 Thermal Maps and Road Sensors**

2.2.1 The Operating Company shall use thermal maps where available and road sensor data which shall be provided during the Mobilisation Period by the Director to the Operating Company.

2.2.2 The Operating Company shall be responsible for all telecommunication links to meet the other provisions of this Part 2 of Schedule 7.

2.2.3 All ice sensing or ice prediction equipment used shall use an open protocol based upon the Department for Transport Developed TR2020B protocol.

Updated protocols can be used but only where open access of the protocol shall be available to the Director to allow access to such protocol to other provisions of equipment or service.

2.2.4 Road sensors shall be maintained by the Operating Company in accordance with the requirements of Part 1 of this Schedule 7.

2.2.5 Road sensors shall provide automatic hourly updates of conditions during the Winter Service Period except from 1 November until 31 March when the updates shall be at 20 minute intervals.

## **2.3 Winter Service Duty Officer**

2.3.1 The Winter Service Duty Officer shall be authorised by the Operating Company to take decisions and to issue instructions for implementing and directing the Winter Service and shall take such decisions and issue such instructions as are required for implementing and directing the Winter Service.

## **2.4 Decision Making Processes**

2.4.1 During the Winter Service Period the Operating Company shall monitor

- (i) weather forecasts
- (ii) Trunk Road conditions
- (iii) data from road sensors and
- (iv) the computerised road weather information system

to ensure that the Winter Service Duty Officer receives and monitors climatic and road information to assist in the decision making process and in taking appropriate actions.



- 2.4.2 The Operating Company shall provide details in the Winter Service Plan for specific arrangements to ensure precautionary treatments shall be provided for Trunk Roads within the Unit when low confidence level weather forecasts shall be issued by the expert weather forecasting service provider for variable road and weather conditions.

When such conditions shall be forecast appropriate actions shall be taken to maintain the said Trunk Roads in safe conditions based on the Operating Company's Winter Service Plan.

- 2.4.3 Following any precautionary treatment undertaken by the Operating Company the Winter Service Duty Officer shall continue to monitor the weather forecasts and the actual weather conditions including but not limited to

- (i) reports from Winter Service Patrols and
- (ii) data from the computerised road weather information system

to determine the ongoing effectiveness of the treatment and to instruct further treatment when this shall be required.

This shall be particularly important in situations where

- (iii) precipitation shall be forecast or has occurred which may reduce the effectiveness of a treatment and
- (iv) the trend data from the computerised road weather information system changes from that which was predicted.

Notwithstanding any other provisions of the Contract where the information available to the Winter Service Duty Officer casts doubt on the ongoing effectiveness of any precautionary treatment which has been undertaken in terms of the ability of residual levels of de-icing material remaining on any pavement surface to deal with forecast or actual weather conditions the Winter Service Duty Officer shall arrange for a further precautionary treatment to be carried out.

## **2.5 Liaison and Communication**

- 2.5.1 The Operating Company shall liaise closely with

- (i) the Police
- (ii) the NADICS operator
- (iii) adjacent local road authorities and
- (iv) adjacent Trunk Road operating companies

to monitor adverse winter weather and travelling conditions and notify NADICS immediately and other such organisations within 30 minutes.

- 2.5.2 When Winter Service Operations shall be planned the Operating Company shall email or facsimile as required by the organisation the Police and the NADICS operator informing them of such Operations and when appropriate request that messages be displayed on all relevant electronic warning systems and variable message signs.

Adjacent roads authorities and/or their agents and other Trunk Road Operating companies shall also be notified by the Operating Company.

2.5.3 The Operating Company shall work closely with the Police who may supply information to the media regarding Trunk Road travelling conditions during periods of Severe Weather.

During such periods of Severe Weather the Operating Company shall have responsibility for reporting the known effects of such conditions to the NADICS operator as referred to in paragraphs 5.1.1 to 5.1.3 inclusive of Part 8 of Schedule 3.

2.5.4 The Operating Company shall liaise closely with adjacent Trunk Road operating companies to ensure a consistent level of Winter Service for Trunk Roads shall be provided at boundary interfaces including but not limited to priorities for snow and ice clearance.

## **2.6 Winter Service Patrols**

2.6.1 From 1 November to 31 March inclusive when the forecast air temperature for relevant climatic areas shall be less than or equal to 4 °C the Operating Company shall carry out Winter Service Patrols on those sections of Trunk Roads identified in Annex 7.2/C to this Part 2 of this Schedule 7.

2.6.2 Winter Service Patrols shall

- (i) report on road conditions encountered and take instruction from the Winter Service Duty Officer
- (ii) provide an immediate response to carry out precautionary treatments or other de-icing Operations for carriageway
- (iii) deal with any situation on the Winter Service Patrol including areas requiring special attention as stated in paragraph 2.7 of this Part 2 of this Schedule 7
- (iv) undertake short stops for minor maintenance such as clearing grips removing debris and the like and
- (v) provide daily reports in the format indicated in Appendix WSP 1 of Annex 7.2/I of this Part 2 of this Schedule 7.

2.6.3 Where any situation on the Winter Service Patrol route cannot be dealt with by any of the actions described in paragraph 2.6.2 of this Part 2 of this Schedule 7 of the Contract then additional resources shall require to be deployed by the Operating Company.

Where any incident shall occur within the Unit but outwith the Winter Service Patrol route then additional resources shall be deployed by the Operating Company to deal with such incident

2.6.4 Winter Constructional Plant for Winter Service Patrols shall be

- (i) fully loaded with de-icing material
- (ii) equipped with on board data logging equipment to record in accordance with Annex 7.2/I of this Part 2 of this Schedule 7 actions taken by Winter Service Patrols and
- (iii) equipped with an on board global positioning system.

2.6.5 The Operating Company shall complete the routes within 4 hours of commencement at 00:00 hours and or 04:00 hours respectively when the condition referred to in paragraph 2.6.1 of this Part 2 of this Schedule 7 shall prevail.

The Operating Company shall allow for

- (i) rest periods
- (ii) patrolling both sides of dual carriageways and
- (iii) dealing with by any of the actions described in paragraph 2.6.2 of this Part 2 of this Schedule 7 of this Contract and the like.

2.6.6 The Operating Company shall monitor the operation of the Winter Service Patrols to ensure compliance with the 4 hour completion time as referred to in paragraph 2.6.5 to this Part 2 of this Schedule 7.

2.6.7 Winter Constructional Plant for Winter Service Patrols shall be used only for Winter Service Patrols and shall not be used as precautionary treatment vehicles.

## **2.7 Areas Requiring Special Attention**

2.7.1 These areas requiring special attention are known areas where frost is prone to occur and where run off is liable to happen.

2.7.2 The Operating Company shall throughout the Contract Period review the areas requiring special attention as referred to in Annex 7.2/E to this Part 2 of this Schedule 7 and add other areas to the list it considers necessary.

2.7.3 Winter Service Patrols shall pay particular attention to the areas requiring special attention.

## **2.8 Road Closures**

2.8.1 When the Operating Company in consultation with the Police considers that snow shall be making or has made the road unsafe to vehicular traffic it shall arrange with the Police to close the snow gates listed in Annex 7.2/F to this Part 2 of this Schedule 7.

The Operating Company shall liaise with the Police and establish procedures for the use of snow gates including procedures for checking that no vehicles or pedestrians shall be trapped between the snow gates.

The Operating Company shall include these procedures in the Winter Maintenance Plan.

2.8.2 The Police shall issue instructions to the Operating Company to close the snow gates.

When a snow gate shall be intended to be closed the Operating Company shall immediately notify the NADICS operator by telephone.

A written report shall be submitted to the Director within 12 hours of the Police closing such snow gate.

2.8.3 The Operating Company shall liaise with and co-operate with the Police to man the gates until a Police search of the road between the gates has been undertaken.

Once it has been ascertained that no-one has been trapped between the snow gates the snow gates shall be secured and all Operating Company personnel withdrawn except those involved in the clearance of snow.

Following the closure of the snow gates snow clearing Operations shall continue between the gates as weather conditions permit to allow the earliest possible re-opening of the Trunk Road.

2.8.4 The Operating Company shall inspect the snow gates annually prior to the commencement of the Winter Service Period and shall undertake Operations to ensure they shall be functional and of effective appearance throughout the Winter Service Period.

2.8.5 Snow gates shall be maintained in accordance with the requirements of Part 1 of this Schedule 7.

2.8.6 Duplicate keys for snow gate locks shall be held by the Police and the Operating Company.

## **2.9 Snow Fences and Shelter Belts**

2.9.1 Snow fences and shelter belts shall be maintained in accordance with the requirements of Part 1 of this Schedule 7.

2.9.2 Within the First Annual Period the Operating Company shall review the need for such fences and shelter belts on the Unit and where the Operating Company considers that such provisions shall be necessary the Operating Company shall in writing notify the Director.

2.9.3 The locations of existing snow fences shall be as referred to in Annex 7.2/F to this Part 2 of this Schedule 7.

The Operating Company's recommendations for erection of additional snow fences shall be included in the Winter Service Report.

2.9.4 On receipt of an Order the Operating Company shall design snow fences in accordance with the recommendations set out in TRRL Report LR 362 "Snow Fences" by L E Hogbin dated January 1970 unless otherwise consented to in writing by the Director.

## **2.10 Snow Poles**

2.10.1 Snow poles shall be maintained in accordance with Part 1 of this Schedule 7.

2.10.2 The locations of existing snow poles shall be as referred to in Annex 7.2/F of this Part 2 of this Schedule 7.

## **2.11 Salt Bins and Self Help Salt Heaps**

2.11.1 The Operating Company shall maintain as a minimum during the Winter Service Period the salt bins and self help salt heaps at the locations referred to in Annex 7.2/F to this Part 2 of this Schedule 7.

2.11.2 The Operating Company shall review existing locations of salt bins and self help salt heaps and consider provision of additional locations to improve the Winter Service and make recommendations in the Winter Service Report.

## **2.12 Snow and Ice and Hidden Message Signs**

2.12.1 Snow and ice and hidden message signs at locations referred to in Annex 7.2/ F to this Part 2 of this Schedule 7 shall be maintained in accordance with the requirements of Part 1 of this Schedule 7.

- 2.12.2 The Operating Company shall open or erect snow and ice hidden message signs before the start of the Winter Service Period or as shall be necessary as conditions permit to provide information for weather and road conditions as required during the Winter Service Period.

The Operating Company shall liaise with the police when closing roads to co-ordinate the activation of the signs.

## **2.13 Records**

- 2.13.1 The Operating Company shall complete and keep daily records for Winter Service requirements as referred to in Annex 7.2/G to this Part 2 of this Schedule 7.

The records shall be held electronically and have a remote access facility availability to both the Director and the Performance Audit Group.

The records format shall be in accordance with the Quality Management System including the Quality Plan as it relates to Winter Service and be available for inspection at any time by the Director and the Performance Audit Group.

## **3 WINTER SERVICE TREATMENTS**

### **3.1 Precautionary Treatment**

- 3.1.1 The Operating Company shall undertake such precautionary treatment as is required by Series 2800 of Part 1 of Schedule 9.

- 3.1.2 The use of ethylene glycol for de-icing at the locations identified in Annex 7.2/H of this Part 2 of this Schedule 7 shall be as required in Series 2800 of Part 1 of Schedule 9.

### **3.2 Pre-Wetted Salt Treatment**

- 3.2.1 If the Operating Company shall propose to use pre-wetted salt for precautionary de-icing treatments for any treatment routes in the Unit details of such proposals shall be as provided in Appendix WSP 2 of Annex 7.2/I of this Part 2 of this Schedule 7 and in the Operating Company's Winter Service Plan.

- 3.2.2 If the Operating Company shall not propose to use pre-wetted salt for precautionary de-icing treatments for all treatment routes the Director may not later than 90 days prior to the commencement of the First Annual Period instruct the Operating Company to use pre-wetted salt for precautionary de-icing treatments for the remaining precautionary treatment routes and this shall be subject to an Order.

- 3.2.3 If an Order to use pre-wetted salt for precautionary de-icing treatments shall have been issued by the Director it shall cover all Annual Periods and all those precautionary treatment routes where the Operating Company does not propose to use pre-wetted salt.

### **3.3 Response Times**

- 3.3.1 When an immediate response shall be required for snow and ice clearance precautionary treatment and other de-icing Operations for

- (i) carriageways
- (ii) footways

(iii) footbridges and

(iv) cycleways

the Operating Company shall mobilise and commence such snow and ice clearance precautionary treatment and other de-icing Operations within one hour of the Winter Service Duty Officer's decision.

3.3.2 When a planned response shall be required for precautionary treatment and other de-icing Operations the Operating Company shall mobilise and commence precautionary treatments to ensure completion before snow or ice conditions shall be forecast to occur.

3.3.3 For immediate or planned responses the Operating Company shall complete precautionary treatment routes within two hours from the commencement of the precautionary treatment and other de-icing Operations.

Should a front line Winter Constructional Plant vehicle break down once it has been mobilised then a reserve Winter Constructional Plant vehicle shall require to be mobilised and commence Operations within one hour of the breakdown.

3.3.4 The response times for snow and ice clearance for

(i) footways

(ii) footbridges and

(iii) cycleways

shall be as follows

(iv) Category A: clear all snow and ice by 08:00 hours or within two hours of snow ceasing to fall during the period 06:00 hours to 18:00 hours.

(v) Category B: clear all snow and ice by 08:00 hours or within two hours of snow ceasing to fall during the period 06:00 hours to 18:00 hours.

(vi) Category C: clear all snow and ice by 17:00 hours the following week day (if the following day is a Saturday or Sunday then the area shall be cleared on the next week day that is a Monday).

3.3.5 Footway categories shall be as referred to in Annex 7.2/D to this Part 2 of this Schedule 7.

3.3.6 The Operating Company shall identify in the Winter Service Plan and shall put in place arrangements and resources which shall ensure that carriageway precautionary treatments shall be provided for sections of Trunk Roads on the Unit where normal access shall be prevented due to weather or other related incidents. For such precautionary treatments the Operating Company shall mobilise within one hour of becoming aware of the incident and shall have completed the precautionary treatment within three hours.

3.3.7 The Winter Service Plan shall describe the arrangements and the response times to be used by the Operating Company to mobilise Winter Constructional Plant and such other resources as shall be required to deal with snow clearance and ice clearance of carriageways and to meet the requirements of Clause 2804AR of Part 1 of Schedule 9 of this Contract.

**SCOTTISH MINISTERS' REQUIREMENTS**  
**SCHEDULE 7 PART 2**  
**WINTER SERVICE**

**ANNEX 7.2/A – Winter Service Plan**

***This page is blank***



## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

##### **ANNEX 7.2/A – Winter Service Plan**

## **1 MANAGEMENT ARRANGEMENTS**

### **1.1 Winter Service Manager**

- 1.1.1 Name
- 1.1.2 Qualifications
- 1.1.3 Experience
- 1.1.4 Responsibilities

### **1.2 Winter Service Duty Officers**

- 1.2.1 Names
- 1.2.2 Qualifications
- 1.2.3 Experience
- 1.2.4 Responsibilities

### **1.3 Monitoring Arrangements**

- 1.3.1 Monitoring arrangements during normal working hours
- 1.3.2 Monitoring arrangements outwith normal working hours

### **1.4 Personnel Resources**

- 1.4.1 Names of staff and labour resources

### **1.5 Call out arrangements**

- 1.5.1 Call out arrangements during normal working hours
- 1.5.2 Call out arrangements outwith normal working hours
- 1.5.3 Contact arrangements during normal working hours
- 1.5.4 Contact arrangements outwith normal working hours
- 1.5.5 Mobilisation times

### **1.6 Communications equipment**

### **1.7 Training for Managers and Other Staff**

- 1.7.1 Details of previous training
- 1.7.2 Details of proposed training

## **2 WEATHER FORECASTING**

### **2.1 Purpose**

### **2.2 Methodology**

### **2.3 Weather forecasting service**

2.3.1 Climatic domains

2.3.2 Weather radar

2.3.3 Ice sensors and weather forecast sites

2.3.4 Thermal mapping

2.3.5 Location plans

### **2.4 Computer Systems**

## **3 MONITORING ARRANGEMENTS FOR AREAS REQUIRING SPECIAL ATTENTION**

## **4 DECISION MAKING**

### **4.1 Role of the Winter Service Manager**

### **4.2 Role of the Winter Service Duty Officer**

4.2.1 Winter Service Patrol mobilisation

4.2.2 Proposed spread rates for precautionary treatment of carriageways

4.2.3 Proposed spread rates for precautionary treatment of footways footbridges and cycleways

4.2.4 Proposals for precautionary and additional de-icing treatments when low confidence forecasts shall be issued for variable road and weather conditions

4.2.5 Proposals for monitoring the effectiveness of de-icing materials

4.2.6 Proposed de-icing material spread rates for snow and ice clearance of footways footbridges and cycleways

4.2.7 Road closure and snow gate operational procedures

4.2.8 Activation of snow and ice and hidden message signs

## **5 LIAISON**

### **5.1 Liaison with**

5.1.1 the Director

5.1.2 the Police

5.1.3 the NADICS operator

5.1.4 adjacent local road authorities

5.1.5 adjacent Trunk Road operating companies and

5.1.6 Network Rail

## **6 WINTER SERVICE PATROLS**

### **6.1 Winter Constructional Plant and Reporting**

- 6.1.1 Winter Constructional Plant provided by the Operating Company for the Winter Service Patrols shall be as referred to in Appendix WSP 1 of Annex 7.2/I to this Part 2 of this Schedule 7.
- 6.1.2 A patrol report shall be provided by the Operating Company in the format referred to in Appendix WSP 1 to Annex 7.2/I of this Part 2 of this Schedule 7.

## **7 PRECAUTIONARY TREATMENT ROUTES**

### **7.1 Precautionary Treatment Routes**

- 7.1.1 The Operating Company shall provide in Appendix WSP 2 to Annex 7.2/I of this Part 2 of this Schedule 7 the following information
- (i) precautionary treatment routes
  - (ii) contingency plans for alternative access to precautionary treatment routes where normal access is prevented due to weather related or other incidents
  - (iii) locations of de-icing material loading points and
  - (iv) precautionary treatment routes where the Operating Company shall propose to use pre-wetted salt for de-icing.

## **8 SNOW AND ICE CLEARANCE**

### **8.1 Snow Clearing**

- 8.1.1 Description of arrangements and resources for snowfall
- 8.1.2 Road closure procedure including use of snow gates
- 8.1.3 Prolonged snowfall strategy
- 8.1.4 Treatment strategy for footways, footpaths and cycle facilities to be detailed including location of salt bins where applicable
- 8.1.5 Arrangements for procurement of additional resources in exceptional Severe Weather
- 8.1.6 Plans showing the location of the footways footbridges and cycle facilities in Categories A, B and C

## **9 DE-ICING MATERIALS**

### **9.1 Type**

### **9.2 Specification**

### **9.3 Storage and testing methods**

### **9.4 Suppliers**

### **9.5 Stock levels**

9.5.1 Details of de-icing materials stocks shall be provided by the Operating Company in Appendix WSP 3 to Annex 7.2/I of this Part 2 of this Schedule 7 and shall take account of the minimum stock levels to be maintained as referred to in Appendix WSP 3 of Annex 7.2/I to this Part 2 of this Schedule 7.

9.5.2 "Not used".

## **10 WINTER CONSTRUCTIONAL PLANT**

### **10.1 Front Line Winter Constructional Plant**

10.1.1 Subject to the other provisions of this Contract the Operating Company's front line Winter Constructional Plant permanently available within the Unit for the Winter Service for carriageways shall be as referred to in WSP 5 of Annex 7.2/I of this Part 2 of this Schedule 7.

Such Winter Constructional Plant shall as a minimum have the ability to

- (i) deliver 20 grammes per square metre precautionary treatment to all routes simultaneously
- (ii) clear ice and snow to a depth up to 100 mm as required by Clause 2804AR of Appendix 0/1 of Part 1 of Schedule 9
- (iii) comply with the requirements of paragraph 3.3.6 of this Part 2 of this Schedule 7 and
- (iv) comply with the requirements of paragraphs 2.6.1 to 2.6.6 inclusive of this Part 2 of this Schedule 7

10.1.2 Subject to the other provisions of this Contract the Operating Company's front line Winter Constructional Plant permanently within the Unit for the Winter Service for footways footbridges and cycleways shall be as referred to in Appendix WSP 5 of Annex 7.2/I of this Part 2 of this Schedule 7.

Such Winter Constructional Plant shall as a minimum have the ability to

- (i) deliver 20 grammes per square metre precautionary treatment to all routes simultaneously and
- (ii) clear ice and snow to a depth up to 100 mm as required by Clause 2804AR of Appendix 0/1 of Part 1 of Schedule 9.

### **10.2 Reserve Winter Constructional Plant**

10.2.1 The Operating Company's reserve Winter Constructional Plant shall be that part of the Winter Constructional Plant permanently available within the Unit to supplement front line Constructional Plant for the Winter Service for carriageways footways footbridges and cycleways in situations when such front line Constructional Plant shall not be available for whatever reason for the Winter Service.

The reserve Winter Constructional Plant may also be used to supplement front line Winter Constructional Plant in snow conditions.

10.2.2 Subject to the other provisions of this Contract the reserve Winter Constructional Plant shall be as referred to in Appendix WSP 5 to Annex 7.2/I of this Part 2 of this Schedule 7.

### **10.3 Additional Winter Constructional Plant**

10.3.1 The additional Winter Constructional Plant shall be that part of the Winter Constructional Plant which shall be available for the Winter Service for carriageways footways footbridges and cycleways either directly under the control of the Operating Company or through contingency arrangements with third parties to deal with

- (i) snow to a depth of more than 100 mm and
- (ii) any other winter weather conditions which cannot be dealt with by front line or reserve Winter Constructional Plant.

Subject to the other provisions of this Contract the additional Winter Constructional Plant shall be as referred to in Appendix WSP 5 to Annex 7.2/I to this Part 2 of this Schedule 7

10.3.2 Mobilisation arrangements for additional Winter Constructional Plant available through contingency arrangements for the Winter Service for carriageways footways footbridges and cycleways shall be as referred to in Appendix WSP 5 to Annex 7.2/I of this Part 2 of this Schedule 7.

### **10.4 Loading Winter Constructional Plant**

10.4.1 Loading Winter Constructional Plant available within the Unit for loading front line reserve and additional Winter Constructional Plant shall be as referred to in Appendix WSP 5 of Annex 7.2/I to this Part 2 of this Schedule 7.

### **10.5 Calibration of Constructional Plant**

10.5.1 Calibration arrangements and procedures for front line and reserve Winter Constructional Plant shall be as described in sub-Clause 8 of Clause 2805AR of Part 1 of Schedule 9 of this Contract. The Winter Service Plan shall describe how the requirements of sub-Clause 8 shall be met and where and how the calibration certificates shall be held.

## **11 PLANS**

### **11.1 Precautionary treatment routes for carriageways**

### **11.2 Precautionary treatment routes for footways footbridges and cycleways**

### **11.3 Winter Service Patrol routes**

11.3.1 Location plans for

- (i) ice sensors and forecast sites
- (ii) snow gates
- (iii) snow fences
- (iv) shelter belts
- (v) snow poles
- (vi) snow ice and hidden message signs
- (vii) salt bins and self help salt heaps and
- (viii) other facilities

**12 COMPILING AND MAINTAINING RECORDS**

**13 SNOW POLES**

- (i) Maintenance
- (ii) Replacement of damaged or missing snow poles
- (iii) Refurbishment
- (iv) Reserve stocks

**14 SNOW GATES**

- (i) Maintenance
- (ii) Operation
- (iii) Liaison

**15 VARIABLE MESSAGE SNOW ICE AND HIDDEN MESSAGE SIGNS**

**15.1 Operating and liaison procedures**

**16 SALT BINS AND SELF HELP SALT HEAPS**

**16.1 Stock level monitoring and replenishment procedures**

**17 SALT MEASUREMENT APPARATUS**

**17.1 Details of equipment and locations and recording methods**

**SCOTTISH MINISTERS' REQUIREMENTS**  
**SCHEDULE 7 PART 2**  
**WINTER SERVICE**

**ANNEX 7.2/B – Winter Service Report**

*This page is blank*



## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

##### **ANNEX 7.2/B – Winter Service Annual Report**

- 1. The Winter Service Report shall provide**
  - 1.1. An overview and review of the service provided
  - 1.2. A summary of key performance reports
  - 1.3. Information on significant events and related actions
  - 1.4. An assessment of the accuracy of weather forecasts provided
  - 1.5. An assessment of ice sensor and forecast site performance
  - 1.6. An analysis of the ability of the Quality Management System to capture reported non compliances
  - 1.7. Innovations and improvements implemented
  - 1.8. Recommendations for continuous improvement
  - 1.9. An executive summary of the annual report
  - 1.10. Actions taken during periods of low confidence forecasting for variable and marginal winter weather conditions
  - 1.11. Use of reserve and additional Winter Constructional Plant

***This page is blank***

## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

#### **ANNEX 7.2/C – Winter Service Patrols**

***This page is blank***

## SCOTTISH MINISTERS' REQUIREMENTS

### SCHEDULE 7 PART 2

#### WINTER SERVICE

#### ANNEX 7.2/C – Winter Service Patrols

1. The locations of those sections of Trunk Roads to be patrolled are indicated in Table 1 of this Annex 7.2/C.

**Table 1 – Patrols**

<b>Road Number</b>	<b>Location</b>
A76	Kilmarnock (Bellfield Roundabout) to Dumfries Bypass
A75	Dumfries to M6 Junction
A737	Kilwinning to Kilbarchan (start of dual carriageway)
A77	Girvan (southern roundabout) to Stranraer
A75	Stranraer to B796 (Junction at Gatehouse of Fleet)

2. Details of the Operating Company's patrol routes shall be provided by the Operating Company in Table 2 of Appendix WSP1 of Annex 7.2/I to this Part 2 of this Schedule 7.
3. Patrol reports shall be recorded in accordance with Table 3 of Appendix WSP 1 of Annex 7.2/I to this Part 2 of this Schedule 7.

***This page is blank***

**SCOTTISH MINISTERS' REQUIREMENTS**

**SCHEDULE 7 PART 2**

**WINTER SERVICE**

**ANNEX 7.2/D – Locations of Sites for De-icing Treatment for Category A B and C  
Footways Footbridges and Cycleways**

***This page is blank***



## SCOTTISH MINISTERS' REQUIREMENTS

### SCHEDULE 7 PART 2

#### WINTER SERVICE

#### ANNEX 7.2/D – Locations of Sites for De-icing Treatment for Category A B and C Footways Footbridges and Cycleways

**Table 1 Footway Categories for the Winter Service**

Route	Location	Details of Footway			Length (m)		
		Start	Finish	Name of Street	Category A	Category B	Category C
A726	East Kilbride	Righead	Murray Roundabout			900	
A77	Girvan	Start of Dalrymple St	Ailsa St West	Dalrymple St	260	260	
		Ailsa St West	Duncan St	Dalrymple St	560	560	
		Shallochpark Roundabout	Rajput Drive	Bennane Road			380
		Rajput Drive	Kirkpatrick St	Bennane Road			580
		Kirkpatrick St	Henrietta St	Kirkpatrick St			600
		Start of Henrietta St	End of Henrietta St	Henrietta St			1640
		End of Henrietta St	Start of Dalrymple St	Knockcushan St			440
		Duncan St	Duff St	Dalrymple St			500
		Duff St	Start of Glendoune St	Dalrymple St			280
		Start of Glendoune St	End of Glendoune St	Glendoune St			700
		Stumpy Corner	Car Park Entrance	Bridge St			680
		Car Park Entrance	Railway Bridge	Vicarton St			1240
A77	Maybole	Carrick St	St Cuthbert's Rd	High St	640	640	
		Carrick Academy	Lady Land Road	Kirkoswald St			1200
		Lady Land Road	Carrick St	Whitehall			420
		Cuthbert St	End of Maybole	Cassillis Road			1140
A76	Mauchline	Fire Station	Garage	Earl Grey St		450	
		Whole length omitting <b>Category B</b> length		Various			3750
A76	New Cumnock	Afton Bridgend	Roundabout			300	
		Roundabout	Garage			1100	
		Whole length omitting <b>Category B</b> length		Various			3500
A8	Greenock	Sinclair St	Bullring Roundabout			4280	
A78		Nelson St to Bullring Roundabout				720	
		Bullrig to Nelson St					6600
A78	Wemyss Bay	Ferry Terminal				720	
		Wemyss Bay					1600
A78	Largs	Safeway Roundabout	Nardini's			1400	
		Dalrv Road	End of Largs	Havlie Brae			1160

Route	Location	Details of Footway			Length (m)		
		Start	Finish	Name of Street	Category A	Category B	Category C
		A760	Safeway Roundabout				1780
		Nardini's	End of 40MPH				2700
		Townend St	New St			280	
		Start of 30MPH	Traffic Lights				1600
A737	Dalry	New St	End of 30MPH				1440
		Tolbooth	Leith's Garage			500	
		Outwith <b>Category B</b> section					1250
A76	Kirkconnel	Pharmacy	Car Park			500	
		Outwith <b>Category B</b> section					1080
A77	Ballantree	Start of Ballantree	Colmonell Junction	Main St			210
		Colmonell Junction	Royal Hotel	Main St			330
		Royal Hotel	Spar Shop	Main St			406
		Spar Shop	End of Ballantree	Main St			1100
A77	Lendalfoot	Start of Lendalfoot	End of Lendalfoot	Main Road			2160
A77	Kirkoswald	Start of Kirkoswald	Balvaird Road	Main St			1040
A77	Minishant	Start of Minishant	End of Minishant	Main Road			1580
A78	Fairlie	Pier Road	Kaim View	Main Road			2180
A78	Seamill	Summerlea Road	Merlewood Road	Ardrossan Road			290
		Merlewood Road	Fullerton Drive	Ardrossan Road			270
		Fullerton Drive	Hyndman Road	Ardrossan Road			630
		Hyndman Road	Seamill Hydro Hotel	Ardrossan Road			400
		Seamill Hydro Hotel	End of Seamill	Ardrossan Road			1220
A78	Ardrossan	Witches Linn	North Cres Avenue	Eglington Road			760
		North Cres Avenue	Harvey St	Eglington Road			180
		Harvey St	Caledonia Road	Eglington Road			270
		Caledonia Road	Glasgow St	Eglington Road			300
		Glasgow St	High Tide Pub	Parkhouse Road			660
		High Tide Pub	Corner of Academy	Parkhouse Road			660
		Corner of Academy	Traffic Lights	Parkhouse Road			1440
A78	Saltcoats	Jacks Road	Kennedy Road	High Road			360
		Kennedy Road	Sharphill Road	High Road			360
		Sharphill Road	Old Raisse Road	High Road			120
		Old Raisse Road	Nelson Road	High Road			800
		Nelson Road	High Road	High Road			240
A78	Stevenston	Graham Ave	Mayfield Road	Glencairn St			1000
		Mayfield Road	Lochard Road	Glencairn St			800
		Lochard Road	Wallace Ave	Glencairn St			540
		Wallace Ave	Hayocks Roundabout	Glencairn St			440
		Hayocks Roundabout	Pennyburn Roundabout	Kilwinning Road			840
A82		Dunglass	Bonhill				8400

Route	Location	Details of Footway			Length (m)		
		Start	Finish	Name of Street	Category A	Category B	Category C
A8	Port Glasgow	Newark Roundabout	Sinclair St				7600
A737/A8	Kilwinning	Within 30MPH in Kilwinning					6000
A737	Beith	Between 30MPH signs in Beith					400
A78	Skelmorlie	Skelmorlie					2300
A77	Stranraer	A75 Junction	Marine GDS				370
		Marine GDS	Bowling Green Road				200
		Bowling Green Road	Ladies Walk				360
		Ladies Walk	McMasters Walk				870
		McMasters Walk	Aird Donald Caravan Park				760
A75		Various					3900
A77	Cairnryan	Start of Cairnryan	P&O Entrance				520
		P&O Entrance	Woodburn Entrance				600
		Woodburn Entrance	End of Claddyburn Terrace				260
		Claddyburn Terrace	Petrol Station				260
		Petrol Station	Cairnryan Port Entrance				550
A75	Dunragit	Main St					1900
A75	Springholm	Springholm					1900
A75	Crocketford	Crocketford					900
A76	Dumfries	Lincluden	Newbridge				1500
A76	Closeburn	Coal Yard	Garage				500
A76	Thornhill	101 Boutique	South End				400
A76	Carronbridge						760
A701	Heathhall	A75 Roundabout	Locharbriggs				3370

\* Cycle Facilities within urban areas to be treated as Category ‘C’ footways. These shall be identified in the Winter Service Plan.

*This page is blank*

## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

#### **ANNEX 7.2/E – Locations of Areas requiring Special attention**

***This page is blank***

## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

#### **ANNEX 7.2/E – Locations of Areas requiring Special attention**

##### **1. Frost Susceptible Areas and Water Run Off Areas**

<b>Road Number</b>	<b>Location</b>
A701	Sawmill Road.
A701	Mollinsburn to Southerly Ridge.
A78	Papermill at Irvine, between Meadowhead and Newhouse Interchange.
A78	Skelmorlie.
A78	Lady Alice Park, Inverkip Road, Greenock.
A737	Manrahead to the Den.
A78	Between Meadowhead and Edlinton.
A77	South of Ballantree at the Watertanks.
A76	Polneil Railway Bridge

***This page is blank***



## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

##### **ANNEX 7.2/F – Location Details**

- 1. Locations of Snow Fences, Snow Gates, Salt Bins and Salt Heaps**
- 2. Locations of Snow and Ice and Hidden Message Signs**
- 3. Locations of Road Sensors and Forecast Sites**
- 4. Locations of Snow Poles**

*This page is blank*

## SCOTTISH MINISTERS' REQUIREMENTS

### SCHEDULE 7 PART 2

#### WINTER SERVICE

#### ANNEX 7.2/F – Location Details

##### 1. Locations of Snow Fences, Snow Gates, Salt Bins and Salt Heaps

Road Number	Snow Fence (Meters)	Snow Gates (Number)	Salt Bins (Number)	Salt Heaps (Number)
A75	0	0	2	0
A76	0	0	7	0
A701	0	0	1	0

##### 2. Locations of Snow, Ice and Hidden Message Signs

Road Number	Location	Detailed Description
M74	Junctions 6 to 7 S/B	Hidden Message Sign 0.25 miles prior to Jct. 7
M74	Junctions 8 to 9 S/B	Hidden Message Sign 0.5 miles prior to Jct. 9
M74	Junctions 10 to 11 S/B	Hidden Message Sign 0.5 miles prior to Jct. 11
A725	Crossbasket	Ice Warning Signs
A701		Ice Warning Signs

##### 3. Locations of Ice and Forecast Sensors

Road Number	Location	Type
A82	Alexandria Bypass	Findlay Irvine
A898	Erskine Bridge	Findlay Irvine
M8	White Cart Viaduct	Findlay Irvine
M8	Kinning Park	Findlay Irvine
M8	Riddrie	Findlay Irvine
M73	Gartcosh	Findlay Irvine
A80	Cumbernauld	Findlay Irvine
M8	Duntilland	Findlay Irvine
M74	Raith Interchange	Findlay Irvine
A725	Crossbaskets	Findlay Irvine
A726	Peel Park	Findlay Irvine
M8	Bishopton (Erskine)	Findlay Irvine
A8	Port Glasgow	Findlay Irvine

Road Number	Location	Type
A78	South of Gourock	Vaisala
A78	North of Ardrossan	Vaisala
A737	Highfield	Vaisala
A737	Howwood	Vaisala
M77	Newton Mearns	Findlay Irvine
A77	Fenwick	Findlay Irvine
A77	Kilmarnock	Findlay Irvine
A77	Dutch House	Findlay Irvine
A76	North West of Cumnock	
M74	Millbank	Findlay Irvine
M6DBFO	Beattock	Unknown (not in SW Unit)
M6DBFO	Lockerbie	Unknown (not in SW Unit)
M6DBFO	Floriston	Unknown (not in SW Unit)
A75	Collin	Vaisala
A701	Southerly Ridge	Vaisala
A76	Closeburn	Vaisala
A76	Kirkconnel	Vaisala
A75	Crocketford	Vaisala
A75	Knockbrex	Vaisala
A75	Drumflower	Vaisala
A77	Glen App	Vaisala
A77	Turnberry	Vaisala
A77	Crossagual	Vaisala

#### 4. Locations of Snow Poles

There are currently no snow poles in the South West Unit.

**SCOTTISH MINISTERS’ REQUIREMENTS**  
**SCHEDULE 7 PART 2**  
**WINTER SERVICE**

**ANNEX 7.2/G – Records**

*This page is blank*

## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

##### **ANNEX 7.2/G – Records**

- 1. Records shall include but not be limited to the following**
- (i) Decisions taken when and by whom
  - (ii) Planned and actual treatment records
  - (iii) Planned and actual response times achieved
  - (iv) Planned and actual commencement times
  - (v) Planned and actual route times
  - (vi) Planned and actual spread rates
  - (vii) Observations and actions taken by the Winter Service patrols
  - (viii) Output from Constructional Plant on-board data capture devices
  - (ix) Constructional Plant down time and software faults
  - (x) Constructional Plant deployment records (including GPS records) and driver/operator logs
  - (xi) Logs for telephone electronic mail and two way communication calls
  - (xii) Loading point de-icing stocks and replenishment orders
  - (xiii) Ice prediction system records
  - (xiv) Weather forecasts and actual weather experienced
  - (xv) Complaints by members of the public and Trunk Road users
  - (xvi) Accidents resulting from winter conditions
  - (xvii) Road closures due to winter conditions and
  - (xviii) Weighed amount of salt spread for each route and the like.

***This page is blank***



**SCOTTISH MINISTERS' REQUIREMENTS**  
**SCHEDULE 7 PART 2**  
**WINTER SERVICE**

**ANNEX 7.2/H – Ethylene Glycol Treatment**

*This page is blank*

## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 7 PART 2**

#### **WINTER SERVICE**

#### **ANNEX 7.2/H – Ethylene Glycol Treatment**

**Ethylene glycol treatment shall extend for 200 metres beyond the limits of the following bridges**

<b>Road Number</b>	<b>Location</b>
M8	Kingston Bridge Complex (including some 4.5 kilometres of approach viaduct and on- and off-ramps)
M8	Whitecart Viaduct
M8	St James Interchange
A898	Erskine Bridge Complex (including approach Structures)

*This page is blank*

**SCOTTISH MINISTERS' REQUIREMENTS**  
**SCHEDULE 7 PART 2**  
**WINTER SERVICE**

**ANNEX 7.2/I –Winter Service Plan Appendices**

***Commercially sensitive information not included in this version***

*This page is blank*