

This is Document “Schedule 7 Part 9” referred to in this Contract

SCOTTISH MINISTERS’ REQUIREMENTS

SCHEDULE 7 PART 9

SEVERE WEATHER SERVICES

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SEVERE WEATHER SERVICES

1 SEVERE WEATHER SERVICES

1.1 Expert Weather Forecasting Services

1.1.1 The Scottish Ministers wish to minimise delays and disruption to Trunk Road users caused by Severe Weather conditions.

1.1.2 The Operating Company shall have access throughout the Contract Period to an expert weather forecasting service consented to in writing by the Director.

Such service shall provide weather forecasts of Trunk Road conditions for each individual climatic domain within the Unit.

During the Winter Service Period the weather forecasts shall be developed with the assistance of data recorded from road sensors within each climatic domain.

1.1.3 The Operating Company shall continuously monitor weather and Trunk Road conditions and provide suitably trained designated persons who shall be available on duty or on call at all times to

- (i) receive
 - (ii) monitor and
 - (iii) interpret
- climatic information.

Such persons shall take decisions on the implementation of Operations and issue instructions for the commencement of such Operations.

1.1.4 Details regarding the use of the expert weather forecasting service related to the delivery of the Winter Service shall be as referred to in Annex 7.2/A of Part 2 of this Schedule 7.

1.2 Wind Management

1.2.1 Annex 7.9/A of this Part 9 of this Schedule 7 identifies locations where the Operating Company shall be required to actively undertake wind management.

During the Mobilisation Period the Director shall either

- (i) provide the Operating Company with a wind management plan for each location or
- (ii) issue an Order to the Operating Company to develop a wind management plan

The wind management plan shall be in a format which shall follow the processes as referred to in Annex 7.9/B of this Part 9 of this Schedule 7.

1.2.2 Paragraph 4.1.1 of Part 8 of Schedule 3 of this Contract requires the Director to supply the Operating Company with suitable software to allow two dedicated computer terminals to function as remote NADICS terminals.

Part of the functionality of the NADICS terminals shall be the ability to access real-time wind speed data from monitoring sites located close to the locations identified in Annex 7.9/A of this Part 9 of this Schedule 7.

1.2.3 The Operating Company shall for each location identified in Annex 7.9/A of this Part 9 of this Schedule 7 undertake the duties set out in the wind management plans for each location.

1.2.4 The Director may at any time during the currency of this Contract increase or decrease the number of locations identified at Annex 7.9/A of this Part 9 of this Schedule 7.

1.2.5 The Operating Company shall by 31 March in each Annual Period review each wind management plan against experience in operating it over the previous Annual Period and report to the Director any revisions which it considers would be appropriate.

1.3 Rainfall

1.3.1 Paragraph 1.5.4 of Part 1 of this Schedule 7 requires that each year at least two Safety Inspections shall be carried out by the Operating Company either during or immediately following a period of wet weather to identify areas prone to flooding.

The Operating Company shall utilise the forecast from the expert weather forecasting service to plan such Safety Inspections.

1.3.2 In areas which shall be prone to landslips the Operating Company shall use the weather forecasts to plan landslip patrols in such areas for which exceptional rainfall events shall have been predicted.

1.3.3 During the Mobilisation Period the Operating Company shall submit for the consent of the Director a protocol for the deployment purpose scope and specification of such landslip patrols as are referred to in paragraph 1.3.2 of the Part 9 of Schedule 7 of this Contract.

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ANNEX 7.9/A – Locations within the South West Unit with Wind Management Plans

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ANNEX 7.9/A – Locations within the South West Unit with Wind Management Plans

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ANNEX 7.9/B – Wind Management Processes

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ANNEX 7.9/B – Wind Management Processes

Process	Tasks Undertaken
Risk Identification / State of Alert	<p>The expert weather forecasting service shall issue to the Operating Company a warning of the risk of high winds together with the timescale for such an event.</p> <p>The Operating Company shall activate real time wind speed data collection from monitoring sites located close to specified bridges and at-risk locations, via a module within the NADICS terminal.</p> <p>The Operating Company shall inform the local police and the NADICS operator of the risk of high winds.</p> <p>Local police shall open an incident within their command and control system related to the high wind warning.</p>
Monitoring	<p>The Operating Company shall undertake monitoring of real time wind speed data obtained from sites located within high risk exposed sections of the Trunk Road network.</p> <p>Real time wind speeds displayed on the NADICS wind monitoring and information control system are approaching levels which require 1st stage actions to be carried out, in accordance with the wind management procedures.</p> <p>Operating Company shall receive an automatic alert informing that the wind speed has exceeded the pre-determined threshold and an action is required to set variable message and information signs.</p>
Implementation of Restrictions	<p>The Operating Company shall inform the local police that they shall be required to attend on site to enforce the high sided vehicle restriction.</p> <p>The Operating Company shall instruct the traffic management crew to attend the site to assist the police if necessary (setting out of TM has been pre-agreed in the development of the procedures).</p> <p>The local police command and control shall dispatch a vehicle immediately to the location, since an incident had been opened in advance.</p> <p>The police shall confirm attendance on site to the Operating Company.</p> <p>The Operating Company shall set the roadside signs to inform of the high sided vehicle restriction.</p> <p>The Operating Company shall inform the NADICS operator who shall set</p>

Process	Tasks Undertaken
	any remote electronic signs.
Information Dissemination	<p>The NADICS operator shall populate the NADICS website and push incident related data to VASPS and other media.</p> <p>The NADICS operator shall set strategic Variable Messaging Signs to warn of the restrictions to high sided vehicles at the location.</p> <p>If appropriate the NADICS operator shall set strategic Variable Messaging Signs to use a specified alternative route.</p>
Strategic Management	The NADICS operator shall commence monitoring of strategic traffic flows in the vicinity of the wind related incident.
Monitoring	<p>Expert weather forecasting services release an email stating that the risk of the severe gales has increased.</p> <p>The Operating Company receives an automatic alert from the NADICS wind monitoring and information control system informing that the wind speed has increased beyond the 2nd threshold and has remained above for 15 minutes.</p>
Implementation of Road Closure	<p>The Operating Company shall contact the police command and control to agree/confirm that a full closure shall now be implemented.</p> <p>The Operating Company shall implement a full road/bridge closure with the assistance of the police and its traffic management crew.</p> <p>The Operating Company shall liaise with adjacent roads authorities to ensure that the agreed diversion route(s) shall be problem free and not suffering any similar wind impacts.</p>
Information Dissemination	<p>The Operating Company shall inform the NADICS operator of the restriction and the NADICS operator shall update the strategic information relating to the road closure. This includes the setting of Variable Messaging Signs to direct traffic to the previously agreed diversion route(s).</p> <p>The NADICS operator shall continue to monitor the congestion on approach to the problem area and the diversion route.</p> <p>The NADICS operator shall populate the NADICS website and disseminate to media.</p>
Monitoring	<p>The expert weather forecasting service shall alert the Operating Company that the risk of the severe gales has reduced.</p> <p>The Operating Company shall receive an automatic alert from the NADICS wind monitoring and information control system informing that the wind speed has fallen below the 2nd threshold and has remained below for 15 minutes.</p>

Process	Tasks Undertaken
Information Dissemination	The Operating Company shall contact the police command and control to confirm that the closure can be reduced to a restriction on high sided vehicles only.
Reduction in Restrictions	<p>The Operating Company shall reduce the restriction and opens the road/bridge to non high sided traffic.</p> <p>The Operating Company shall inform the NADICS operator of the road re-opening and the NADICS operator shall remove and revise the strategic information to relate to a high sided vehicle closure, continuing to monitor the congestion on approach to the problem area.</p>
Monitoring	<p>The expert weather forecasting service shall alert the Operating Company that the risk of the severe gales has reduced.</p> <p>The Operating Company shall receive an automatic alert from the NADICS wind monitoring and information control system informing that the wind speed has fallen below the 1st threshold and has remained below for 15 minutes.</p>
Information Dissemination	The Operating Company shall contact the police command and control to confirm that the high sided vehicle restriction can be removed.
Removal of Restrictions / State of Alert	<p>The Operating Company shall remove the restriction and the police and traffic management crew are stood down.</p> <p>The Operating Company shall inform the NADICS operator of the restriction removal and the NADICS operator shall remove the strategic information relating to the high sided vehicle closure, continuing to monitor the congestion on approach to the location.</p>

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