

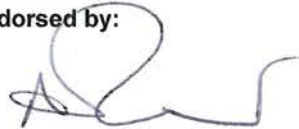
Ref:	NR/L2/OPS/021
Issue:	06
Date:	05 March 2016
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Level 2 Business process

Weather – Managing the operational risks (formerly NR/L2/OCS/021)

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User information

This Network Rail standard contains colour-coding according to the following Red–Amber–Green classification.

Red requirements – no variations permitted

- Red requirements are to be complied with and achieved at all times.
- Red requirements are presented in a red box.
- Red requirements are monitored for compliance.
- Non-compliances will be investigated and corrective actions enforced.

Amber requirements – variations permitted subject to approved risk analysis and mitigation

- Amber requirements are to be complied with unless an approved variation is in place.
- Amber requirements are presented with an amber sidebar.
- Amber requirements are monitored for compliance.
- Variations can only be approved through the national non-compliance process.
- Non-approved variations will be investigated and corrective actions enforced.

Green guidance – to be used unless alternative solutions are followed

- Guidance should be followed unless an alternative solution produces a better result.
- Guidance is presented with a dotted green sidebar.
- Guidance is not monitored for compliance.
- Alternative solutions should be documented to demonstrate effective control.

Amendment marks

- First document amendments are presented with a single black line to the right of the affected text.
- Second document amendments are presented with a double black line to the right of the affected text.

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Issue record

Issue	Date	Comments
01	August 2003	Original issue
02	October 2004	Amended to reflect organisational change
03	March 2010	Organisational changes within Network Rail to Job Titles and to capture the change of Weather information supplier to Network Rail and the benefits
04	March 2011	Changed to OCS standard Clause 5.7 reference to www.smtleaffall.co.uk removed (Clause number changed to 4.7 due to re-pagination)
05	June 2011	Correction to cross references within standard
06	March 2016	Changed to OPS standard Inclusion of SEJs and autumn-specific forecasts. Amendment to reflect the changes introduced by the revised extreme weather response process

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 04 June 2016.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 3 (Option Selection) to continue to comply with the issue of any relevant Network Rail standards current when GRIP Stage 3 was completed and not to comply with requirements contained herein, unless stipulated otherwise in the scope of this standard.

Reference documentation

Railway Operational Code Part C	Arrangements for Provision of Equipment to deal with Adverse Weather Conditions; and the preparation for and response to Seasonal Disruptions.
GO/RT3208	Arrangements concerning the non-operation of track circuits during the leaf fall contamination period.
NR/L2/OCS/095	Determining High Risk Sites for Wrong Side Track Circuit Failures in Leaf Fall Area and for Low Rail Adhesion.
NR/L3/OPS/043/7.1	National Control Instructions, Weather and Seasonal Management.
NR/L2/TRK/001	Inspection and Maintenance of Permanent Way.

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NR/L3/TRK/1010

Management of Responses to Extreme Weather Conditions at Structures, Earthworks and Other Key Locations.

NR/365WM/Mod A to G

Weather and Seasonal Management Guidelines.

NR/L2/CIV/086

Management of Earthworks.

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1 Purpose

The Railway Operational Code outlines the industry requirements to:

- a) sustain the operation of train services on the network in accordance with the working timetable;
- b) restore operations following a disruption in accordance with the working timetable, taking into account:
 - 1. the interests of safety and security;
 - 2. the needs of passengers and freight customers;
 - 3. the efficient and economical operation of the network and of trains operating on it.

In order to meet these requirements the Railway Operational Code directs Network Rail to provide industry guidance on the management of operational disruptions resulting from weather hazards.

This standard has been put in place to meet this obligation.

This standard supports the rail industry in managing its response to weather. It enhances industry safety, reduces operational risk and minimises the impact of weather hazards on passengers and the public.

2 Scope

This standard mandates how Network Rail:

- a) prepares, manages and responds to operational risks arising from adverse and extreme weather events;
- b) prepares for, mitigates and manages seasonal weather related activities.

In addition, it provides guidance to train and freight operators in their actions to manage weather risks.

This standard applies to these activities:

- a) forecasting of weather hazards including:
 - 1. routine preparation, planning and response to weather hazards;
 - 2. seasonal weather preparation and its management;
 - 3. near real-time monitoring of weather hazards.
- b) recovery and lessons learnt from weather hazard responses;
- c) weather hazard contingency planning, plan rehearsal and exercising;
- d) vulnerable asset response planning.

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3 Weather response roles and responsibilities

The Network Rail National Weather Client shall:

- a) Establish and maintain the Network Rail weather strategy.
- b) Establish and communicate weather management best practice.
- c) Set performance and safety targets under various weather and seasonal conditions.
- d) Establish and communicate a weather governance framework.
- e) Establish control measures (e.g. extreme weather response process) to enable the continued integrity and safe operation of the railway in the forecast weather conditions and for the timescale involved.
- f) Establish a weather management and seasonal preparedness operating framework.
- g) Liaise with industry members to co-ordinate engineering and operational responses, and check that they are appropriate for the weather situation.

The National Weather Specialist shall:

- a) Provide the routine leadership and management to implement the Network Rail Weather Strategy.
- b) Lead the co-ordination of actions to assess and manage the safety implications of weather forecasts that affect Network Rail's managed infrastructure.
- c) Implement and communicate weather management best practice.
- d) Implement performance and safety targets under the weather and seasonal conditions.
- e) Implement and communicate a weather governance framework.
- f) Implement control measures (e.g. extreme weather response process) to enable the integrity and safe operation of the railway in the forecast weather conditions and for the timescale involved.
- g) Establish a weather management and seasonal preparedness operating framework.
- h) Confirm that weather forecasts appropriate to Network Rail's operations and safety responsibilities are distributed to operational users.
- i) Communicate industry wide guidance on the formulation of seasonal arrangements, responses to seasonal disruption and weather-related hazards.
- j) Prepare and communicate the Network Rail high-level seasonal calendar.
- k) Communicate industry-wide guidance on the formulation of the '365' suite of documents noted in [NR/365WM/Mod A to G](#).
- l) Support, train and mentor Route Seasons Delivery Specialists.

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The Route Current Operations Managers shall:

- a) Communicate Route and local forecasts to key Route stakeholders on a daily basis.
- b) Review the local adverse or extreme weather plan drafted by Route Asset Managers (RAMs).
- c) Assess the potential impact of forecast weather and effectiveness of response actions.
- d) Review and record the effectiveness of the weather forecast and actions taken.
- e) Distribute response actions to industry operators.
- f) Produce and distribute a weather hazard checklist for control staff (AM2).
- g) Check that conference outputs are structured and concise.
- h) Check that end-to-end extreme weather response elements are subject to desktop reviews at regular intervals.
- i) Check that contingency and disruption plans are regularly reviewed and rehearsed.
- j) Check that: recovery and review conferences are carried out promptly; actions are tracked and if necessary processes reviewed.
- k) Check that records of disruption conferences are maintained for assurance and review.

The Route Seasons Delivery Specialists shall:

- a) Produce and communicate Route seasonal arrangements, and facilitate the involvement of the other access parties in their preparation and review.
- b) Identify Route-specific tasks and measures to confirm that, in accommodating the effects of seasonal disruption and weather hazards, the most efficient and economical use of available resources is made.
- c) Encourage operators to participate in consultations and support the planning and production of Route seasonal arrangements.
- d) Prepare and communicate the Route seasonal calendar, linking to the Network Rail high level seasonal calendar where applicable.
- e) Support the Route Current Operations Manager (COM) to facilitate and implement the extreme weather response process, particularly disruption management, recover and feedback conference and contingency planning and rehearsal.

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The Route Asset Managers shall:

- a) Prepare and communicate Route and local adverse and extreme weather plans in accordance with [NR/L2/CIV/086-4](#) and [NR/L3/TRK/1010](#) respectively.
- b) Distribute asset-specific response guidance based on the weather hazard and its impact on specific assets.
- c) Check that adverse and extreme weather plans are reviewed regularly and that they cover all Route asset groupings, vulnerable assets and high risk areas.
- d) Check that adverse and extreme weather plans and response plans are rehearsed at regular intervals.
- e) Confirm their inclusion on conference standing invitee lists and attend the relevant extreme weather response conference.
- f) Provide input to contingency and disruption plan reviews and exercises.

The Route Infrastructure Maintenance Delivery Managers shall:

- a) Review the local adverse and extreme weather plan drafted by RAMs.
- b) Produce and communicate a weather hazard checklist (AM2) for Delivery Unit staff.
- c) Check that Delivery Unit staff nominated to convene and chair Delivery Unit resource and impact conferences (formerly EWAT Part 1) are competent to do so.
- d) Confirm their inclusion on appropriate conference standing invitee lists and attend the conferences.

The Train and Freight Operators shall:

- a) Endorse the concept of a single weather forecast as the basis of disruption management decisions and that this forecast is provided by Network Rail's Weather Service Partner.
- b) Check that individuals involved in weather disruption conferences have permission to take operator-based decisions without involving a member of senior management.
- c) Provide input to contingency and disruption plan reviews and exercises.
- d) Provide input to recovery and review conferences.