



**Scottish Trunk Road
Network –
Forth Bridges Unit**

**Disruption Risk
Management Plan**

Disruption Risk Management Plan



Approval Status

	Name	Position	Date
Prepared By:	██████████	JTRC	November 2015
Checked By:	██████████	WSDO	November 2015
Authorised By:	Keith McKune	Network Manager	November 2015

Revision History

This plan shall be reviewed at a minimum of 6 monthly intervals and updated as appropriate. The reviews, including no changes, are noted in the following table.

Version	Status	Sections Changed	Approved By	Date
01	Draft	All	N/a	N/a
02	Draft	PAG comments	N/A	N/A
03	Draft	TS comments addressed		
04	Draft	Further comments addressed	Keith McKune	November 2015

Disruption Risk Management Plan



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1	Introduction
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1.1	Disruption Risk Management Plan and Plan Owner
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This is the Disruption Risk Management Plan (DRMP) provided under the 4th Generation Term Contract for Management and Maintenance of the Scottish Trunk Road Network – Forth Bridge Unit for 5 years commencing 1 June 2015

Within this Plan, the term “Contract” is a reference to the above contract.

The person within Amey responsible for this plan is Mark Arndt [REDACTED] telephone number [REDACTED].

This DRMP has been developed in full compliance with the methodology set down in Transport Scotland’s Manual for the Management of the Risk of Unplanned Network Disruption. The Disruption Risk Manual is located electronically in the Amey Integrated Management System and hard copies held in South Queensferry and Eurocentral offices.

1.2	Scope - Geographical Extent
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This plan covers the following trunk roads in Scotland.

- A823(M) - M90 J2 to Pitreavie
- A90/M90 - J1A Humble to M90 J3 Halbeath
- A90 - Dalmeny to Echline

1.3	Purpose of the Plan
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This purpose of this Plan is to record the work undertaken by Amey in managing Disruption Risk on the trunk network within the Forth Bridges Scottish Trunk Road Unit.

1.4	Updating the DRMP
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This Disruption Risk Management Plan is a controlled document within Amey Integrated Management System. The Plan will be kept under review and will at intervals not exceeding 15 weeks either be updated and reissued, or be the subject of an issued statement declaring that the plan has been reviewed and that no update is required. It is envisaged that updating will be required consequent on changes to the content of the various schedules. In any event, the plan will be re-issued annually in March of each year.

1.5	Distribution of the DRMP
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This Disruption Risk Management Plan will be distributed on first issue and on each re-issue to the following table:

Disruption Risk Management Plan



Copy No.	Name	Organisation	Position	Email address	Electronic (E)/ Paper (P)/ Both (E+P)
1	Mark Arndt	Amey	OCR	[REDACTED]	E+P
2	Jonathon Moran	Transport Scotland	National Network Manager	[REDACTED]	E
3	Gemma Montrose	Transport Scotland	Network Manager	[REDACTED]	E
4	Morag Mackay	Transport Scotland	Network Operations Incident Policy Manager	[REDACTED]	E
5	Wayne Hindshaw	Transport Scotland	Chief Bridge Engineer	[REDACTED]	E
6	[REDACTED]	PAGplus	Mobilisation Manager	[REDACTED]	E
7	[REDACTED]	PAGplus	PAGplus, Technical Manager	[REDACTED]	E
8	MART	Amey	-	-	P
9	Keith McKune	Amey	Network Manager	[REDACTED]	E
10	[REDACTED]	Amey	JTRC	[REDACTED]	E
11	[REDACTED]	Amey	Operations Manager	[REDACTED]	P

2 Structure of the Disruption Risk Management Plan

The scope of the above diagram is covered by the schedules that make up the DRMP.

2.1 INTRODUCTION

2.1.1 The Disruption Risk Management Plan (DRMP) is a high level document supported by a number of plans and activities. The relationship between the DRMP and supporting plans and records is shown schematically in Figure 2.1.



Figure 2.1 – Disruption Risk Management Plan

2.1.2 The scope of Figure 2.1 is covered by the schedules that make up the DRMP.

2.2 DRMP SCHEDULES

2.2.1 The DRMP is comprised of three schedules:

- Schedule DRMP1 - Incidents Data and Risk Registers
- Schedule DRMP2 - Current Management Plans
- Schedule DRMP3 - Disruption Risk Workshops

The content and requirements of these three schedules are set out in the paragraphs 3 to 5 below.

3.0 SCHEDULE DRMP1 – INCIDENTS DATA AND RISK REGISTERS

3.1 INCIDENTS DATA

- 3.1.1 This identifies and locates the Incidents Data which includes the disruption data on which identification of Disruption Risk Sites is based.
- 3.1.2 Amey will have access to records within the Incident Database function of the Integrated Roads Information System (IRIS). All Incident Response data and other relevant information collected by Amey in implementing its Disruption Risk Management Plan will be stored within the IRIS database in accordance with the template provided in Annex 7.3/E of Schedule 7 Part 3 of the Contract.
- 3.1.3 Where Incident Response Records are not captured electronically, the data required will be manually logged into IRIS within 24 hours of the data being collected.
- 3.1.4 Records not required to be stored in IRIS will be retained in accordance with Schedule 5 Part 2, including the daily record sheet to be maintained by Amey in the format provided in Annex 7.3/C of Schedule 7 Part 3 of the Contract, for both Trunk Road Incident Support Service (TRISS) and Incident Support Unit (ISU) activities.
- 3.1.5 As the commission matures and more data becomes available, a more objective judgement of the data can be made utilising the Disruption Risk Assessment Tool within the MMRUND. Until the commission reaches this point, available data along with professional judgement and experience will be used in the evaluation process.

3.2 RISK SITES REGISTER

- 3.2.1 This contains the register of identified Disruption Risk Sites. It is maintained by Amey and updated following Disruption Risk Workshops and at other times as required.
- 3.2.2 The Risk Sites Register is located:
- Electronically within the Amey IMS
 - A hard copy is stored at the Control Room within our Central Office at Forth Bridge Admin Office, South Queensferry, Edinburgh EH30 9SF.
- 3.2.2 The initial identification of sites was based on professional experience and knowledge of the network. The Risk Register will be reviewed and updated every 15 weeks.

3.3 RISK MANAGEMENT ACTION REGISTER

- 3.3.1 This contains the register of Risk Management Action at Disruption Risk Sites where the Risk Level has been assessed as High or Very High. Consideration has been given to Risk Management Action to reduce the risk at that site by hazard reduction or exposure reduction, or both. It includes cross references to file locations holding site specific records of work undertaken to develop proposals and include records of the bid and approval process.
- 3.3.2 At present the currently assessed instances within the Forth Bridges Unit where the risk level is High or Very High are:-
- when high winds require Forth Road Bridge to be closed or partial restrictions imposed,
 - when an abnormal load requires to cross Forth Road Bridge
 - when a heavy vehicle breaks down on Forth Road Bridge

- when a self-harming or other incident occurs requiring restrictions to be imposed
- from the Winter Service Plan – issue of LGVs tackling gradients on M90 northbound between Masterton and Halbeath and M90 southbound between Ferrytoll and Forth Road Bridge

From FETA's experience, if a complete closure of Forth Road Bridge is required to accommodate any of the above disruptive instances and the anticipated duration is expected to be less than 30 minutes, then the least overall disruption is considered to be temporarily holding traffic. If the duration of the disruption is anticipated to be longer than 30 minutes, then traffic will be directed to divert using VMS and / or physical diversion signing. If only one carriageway of Forth Road Bridge is affected by a closure likely to last longer than 30 minutes, consideration will be given to installing contraflow traffic management on Forth Road Bridge to minimise overall disruption.

The Winter Service Plan outlines the additional measures proposed for the M90 under "Areas Requiring Special Attention".

4.0 SCHEDULE DRMP2 – CURRENT MANAGEMENT PLANS

This lists and records the locations of all current Amey management plans and activities which contribute to the management of disruption risk.

4.1 SCHEDULE OF MANAGEMENT PLANS AND RISK MANAGEMENT ACTIVITIES WHICH SUPPORT DISRUPTION RISK MANAGEMENT

- Winter Service Plan
- Standard Incident Diversion Routes
- Forth Bridge Abnormal loads Plan
- Forth Bridge Wind Management Plan
- Incident Response Plan - which incorporates the
 - Incident Support Unit (ISU) Plan
 - Trunk Road Incident Support Service (TRISS) Plan

- 4.1.1 **Note: There is currently no active Landslide or Flood Management Plans in operation within the Forth Bridge Unit as no risk locations have been identified by the previous Operating Company or by FETA.**

ID	<u>Winter Service Plan</u> <i>FBUNIT-SOLUT-Winter Plan-PL-005</i>
Name/Title	Winter Service Plan
Description	Details the arrangements Amey have established to deliver Winter Service in accordance with Contract.
Relationships	Whilst not directly related, the Winter Service Plan will consider current Incident Response or other disruption on the Unit.
Documents	Documents stored within IMS at the link above and within the Control Room.
Owner	Winter Service Manager
Plan Dates	Annual Winter Service Plan submission by the end of July for the forthcoming winter.

ID	<u>Incident Response Plan</u> <i>FBUNIT-SOLUT-Incident Plan-PL-006</i>
Name/Title	Incident Response Plan
Description	Details the arrangements Amey have established to deliver Incident Response in accordance with the Contract.
Relationships	<p>Incorporates both the TRISS Plan [<i>FBUNIT-SOLUT-TRISS Plan-PL-007</i>] and ISU Plan [<i>FBUNIT-SOLUT-Incident Plan-PL-08</i>]</p> <p>Directly related to the following Risk Management Plans:</p> <p>Standard Incident Diversion Routes Plan</p> <p>Forth Bridge Wind Management Plan [<i>FBUNIT-SOLUT-Wind Management Plan – PL-010</i>]</p>
Documents	Documents stored within IMS at the link above and within the Control Room.
Owner	Operations Manager
Plan Dates	Current version approved and in use and subject to quarterly review.

ID	<u>TRISS Plan</u> FBUNIT-SOLUT-TRISS Plan-PL-007
Name/Title	Trunk Road Incident Support Service (TRISS) Plan
Description	Integrated with the Incident Response Plan, the TRISS Plan details the arrangements Amey have established to deliver TRISS in accordance with the Contract
Relationships	Directly related to the following Risk Management Plans: ISU Plan [FBUNIT-SOLUT-Incident Plan-PL-08] Standard Incident Diversion Routes Plan
Documents	Documents stored within IMS at the link above and within the Control Room.
Owner	Operations Manager
Plan Dates	Current version approved and in use and subject to quarterly review.

ID	<u>Incident Support Unit Plan</u> FBUNIT-SOLUT-INCIDENT PLAN-PL-08
Name/Title	Incident Support Units (ISU) Plan
Description	Integrated with the Incident Response Plan, the ISU Plan details the arrangements Amey have established to deliver Incident Response out with the TRISS area and operational hours requirements in accordance with the Contract
Relationships	Directly related to the following Risk Management Plans: TRISS Plan [FBUNIT-SOLUT-TRISS Plan-PL-07] Standard Incident Diversion Routes Plan
Documents	Documents stored within IMS at the link above and within the Control Room.
Owner	Operations Manager
Plan Dates	Current version approved and in use and subject to quarterly review.

ID	<u>Standard Incident Diversion Routes Plan</u>
Name/Title	Standard Incident Diversion Routes
Description	Details the Standard Incident Diversion Routes to be established as part of Amey's Incident Response in the event that a road closure is required as a result of an Incident.
Relationships	Directly related to the following Risk Management Plans: Incident Response Plan [<i>FBUNIT-SOLUT-Incident Plan-PL-006</i>] ISU Plan [<i>FBUNIT-SOLUT-Incident Plan-PL-08</i>] TRISS Plan [<i>FBUNIT-SOLUT-TRISS Plan-PL-007</i>] Forth Bridge Wind Management Plan [<i>FBUNIT-SOLUT-Wind Management Plan – PL-010</i>]
Documents	Documents stored within IMS at the link above and within the Control Room.
Owner	Operations Manager
Plan Dates	Current version approved and subject to review following each implementation of a Standard Incident Diversion Route.

ID	<u>Forth Bridge Wind Management Plan <i>FBUNIT-SOLUT-Wind Management Plan – PL-010</i></u>
Name/Title	Forth Bridge Wind Management Plan
Description	Details the management arrangements and procedures established by Amey to deal with high winds on Forth Bridge.
Relationships	Directly related to the following Risk Management Plans: Standard Incident Diversion Routes Plan
Documents	Documents stored within IMS at the link above, within the Control Room and with the Bridges Manager.
Owner	Major Bridges Manager [REDACTED] [REDACTED]
Plan Dates	Current version approved and in use and subject to annual review.

ID	<u>Forth Bridge Abnormal Loads Plan</u> <i>FBUNIT-SERV-OPERATIONS – PR-010</i>
Name/Title	Forth Bridge Abnormal Loads Plan
Description	Details the management arrangements and procedures established by Amey to deal with abnormal loads crossing on Forth Bridge.
Relationships	Directly related to the following Risk Management Plans:
Documents	Documents stored within IMS at the link above, within the Control Room and with the Bridges Manager.
Owner	Major Bridges Manager [REDACTED]
Plan Dates	Current version approved and in use and subject to annual review.

ID	<u>Forth Bridge Vehicle Recovery Plan</u> <i>FBUNIT-SERV-OPERATIONS – Vehicle Recovery - PR-05</i>
Name/Title	Forth Bridge Vehicle Recovery Plan
Description	Details the management arrangements and procedures established by Amey to deal with Vehicle breakdowns on Forth Bridge.
Relationships	Directly related to the following Risk Management Plans:
Documents	Documents stored within IMS at the link above, within the Control Room and with the Bridges Manager.
Owner	Operations Manager
Plan Dates	Current version approved and in use and subject to annual review.

5.0 Schedule DRMP3 – Disruption Risk Workshops

Contains the dates of past and planned Disruption Risk Workshops, arranged and attended by Operating Company staff and additional invited attendees where appropriate. It includes cross references to records of these workshops.

The following table records details of the Disruption Risk Workshops associated with this plan. The most recent Workshop or planned workshop is at the top of the list.

Date of Workshop	Planned/Held	Attendees	Scope	Location of Workshop Record
30/9/14	Complete	[REDACTED] [REDACTED] [REDACTED]	M9 0-1 River Almond Bridge Strike	Bilston Glen Electronic Drive
30/9/14	Complete	[REDACTED] [REDACTED] Keith McKune	M9 Newbridge Pumps	Bilston Glen Electronic Drive
Nov 2015	Complete	[REDACTED] Police Scotland, [REDACTED] Mark Arndt	Review of events around FRB closure due to UXB, Welldean slip.	

To be filled when arranged and updated accordingly