

**SCOTTISH MINISTERS' REQUIREMENTS****SCHEDULE 4 PART 2****INTEGRATED ROADS INFORMATION SYSTEM**

<b>CONTENTS</b>	<b>Page No.</b>
<b>1. INTEGRATED ROADS INFORMATION SYSTEM</b>	<b>1</b>
1.1 General	1
<b>2. TRUNK ROAD NETWORK REFERENCING AND UPDATING</b>	<b>4</b>
2.1 Network Reference Requirements	4
2.2 Schemes Requiring Network Updates	5
2.3 Information Required for Network Reference System Changes	6
2.4 Inventory Requirements	7
2.5 Inspection and Maintenance Requirements	8
<b>3. PAVEMENT MANAGEMENT FUNCTIONALITY OF THE INTEGRATED ROADS INFORMATION SYSTEM FEATURES</b>	<b>8</b>
<b>4. ROUTINE MAINTENANCE AND MANAGEMENT FUNCTION OF THE INTEGRATED ROADS</b>	<b>10</b>
4.1 Information System Features	10
<b>ANNEX 4.2/A – Maintenance Scheme Data Sheet</b>	<b>11</b>
<b>ANNEX 4.2/B – Notification of SCRIM Category for Network Update Document</b>	<b>15</b>
<b>ANNEX 4.2/C – Network Update Process, Network Change Form and Network Error Form</b>	<b>19</b>
<b>ANNEX 4.2/D – Explanation for Change Form</b>	<b>25</b>
<b>ANNEX 4.2/E – Design for Node Marker Reference Replacement</b>	<b>29</b>



## **SCOTTISH MINISTERS' REQUIREMENTS**

### **SCHEDULE 4 PART 2**

#### **INTEGRATED ROADS INFORMATION SYSTEM**

##### **1. INTEGRATED ROADS INFORMATION SYSTEM**

###### **1.1 General**

- 1.1.1 The Integrated Roads Information System will be provided by the Director to the Operating Company via a hosted solution. The features and functionality of the Integrated Roads Information System are made available to the Operating Company through the internet.
- 1.1.2 The Director will supply the Operating Company with 30 named licences to access the system.
- 1.1.3 The functions within the Integrated Roads Information System are as detailed below:
- (i) Contract control management function of the Integrated Roads Information System including as a minimum data for:
    - (a) financial and contract management activities,
    - (b) work transactions,
    - (c) financial statements, and
    - (d) transaction documents.
  - (ii) Pavement management function of the Integrated Roads Information System including as a minimum data for:
    - (a) condition, and
    - (b) network.
  - (iii) Scheme manager function of the Integrated Roads Information System including as a minimum data for:
    - (a) all Schemes included in draft and approved one and three year programmes and all other identifiable Schemes for future consideration,
    - (b) all Statement of Intents, results of further investigations and other information supporting the Scheme justification,
    - (c) current Scheme costs, programme and status information, and
    - (d) Scheme Design and construction information.
  - (iv) Routine maintenance and management function of the Integrated Roads Information System including as a minimum data for:
    - (a) network,
    - (b) inventory,
    - (c) Defect,
    - (d) inspection, and

(e) maintenance.

The routine maintenance and management function of the Integrated Roads Information System includes all data associated with the Trunk Road network.

(v) Structures management function of the Integrated Roads Information System including as a minimum data for:

- (a) inventory,
- (b) Defect,
- (c) inspection, and
- (d) maintenance.

Additional data management requirements for the Principal Crossings are contained in Schedule 7 Part 7.

(vi) Development management function of the Integrated Roads Information System including as a minimum data for:

- (a) pre application,
- (b) application, and
- (c) response.

(vii) Accident recording and analysis function of the Integrated Roads Information System including as a minimum data for:

- (a) severity, casualty and accident rates,
- (b) identification of cluster sites,
- (c) Performance Indicators to report against accident and casualty reduction targets, and

(viii) Lighting management function of the Integrated Roads Information System including as a minimum data for:

- (a) inventory,
- (b) Defect,
- (c) inspection, and
- (d) maintenance.

(ix) Management of incidents function of the Integrated Roads Information System including as a minimum data for:

- (a) Disruption Risk planning,
- (b) Incident Response planning and Incident Response Operations,
- (c) Trunk Road Incident Support Service planning, and
- (d) Incident Support Units planning.

(x) Intelligent transport system function of the Integrated Roads Information System including as a minimum data for:

- (a) inventory,
    - (b) Defect,
    - (c) inspection, and
    - (d) maintenance.
  - (xi) Performance and reporting measurement system function of the Integrated Roads Information System including as a minimum data for:
    - (a) reports,
    - (b) performance frameworks,
  - (xii) Third party claims function of the Integrated Roads Information System including as a minimum data for:
    - (a) processing and managing third party claims, and
    - (b) claim history.
- 1.1.4 The Operating Company shall not upload any data from its own systems into the Integrated Roads Information System except when transferring data from Data Capture Devices.
- The Integrated Roads Information System allows for downloading of data to Operating Company systems in a variety of manners including standard Microsoft Office output files, comma separated variable files and XML Schema. The Operating Company may submit requests to the Director for the use of alternative output formats. Consent for such usage shall be at the sole discretion of the Director.
- 1.1.5 The Operating Company shall provide the following to enable its licensed users to access the Integrated Roads Information System:
- (i) computer terminals running an acceptable version of Microsoft Internet Explorer or acceptable alternative browser software,
  - (ii) broadband (with a minimum connection speed of one megabit per second for up to five users), corporate network or similar internet access, and
  - (iii) security and firewall setup enabling the following protocols:
    - (a) HyperText Transfer Protocol ("http"),
    - (b) HyperText Transmission Protocol-Secure ("https"),
    - (c) Citrix Internet Connection Sharing ("ICS"), and
    - (d) Remote Desktop Protocol ("RDP") or equivalent.
- 1.1.6 The Director will supply software for Data Capture Devices for use during inspections as required by Schedule 7 Part 1.
- 1.1.7 The Operating Company shall supply all Data Capture Device hardware that shall meet the following minimum specifications:
- (i) laptop, tablet personal computer or similar device running a suitable Windows operating system (not Linux or similar), or any other software as notified by the Director,

- (ii) compliance with the specification in paragraph 1.1.6 of this Part excepting item (ii),
  - (iii) minimum 100 gigabyte data storage memory, and
  - (iv) global positioning system capabilities.
- 1.1.8 The Operating Company shall accommodate all future developments of the Integrated Roads Information System at any time up to and including the Service End Date.
- 1.1.9 The Operating Company shall appoint an Integrated Roads Information System Coordinator in accordance with the requirements of Schedule 5 Part 4, who is responsible for the implementation and management of all modules of the Integrated Roads Information System by the Operating Company.
- 1.1.10 The Integrated Roads Information System Coordinator shall provide to the Director the names and email addresses of staff authorised by the Operating Company to use the Integrated Roads Information System. The Operating Company shall notify the Director within five Working Days of any changes of authorised users. Within one Working Day of any authorised user ceasing to be employed by the Operating Company, the Operating Company shall notify the Director accordingly.

All usernames and passwords supplied by the Director to the Operating Company, or passwords generated by the Operating Company's staff, shall be treated as confidential information and the Operating Company shall ensure staff do not divulge this information to any other person.
- 1.1.11 An Integrated Roads Information System user group meeting shall be held from time to time to inform the Operating Company of future changes to the Integrated Roads Information System and discuss potential developments to the Integrated Roads Information System. Any developments to the Integrated Roads Information System shall be at the sole discretion of the Director.

The Integrated Roads Information System Coordinator shall attend the Integrated Roads Information System user group at the dates and times notified in writing by the Director.
- 1.1.12 During Mobilisation Period 1 and from time to time up to and including the Service End Date, the Director will provide training to staff nominated by the Operating Company on the use of the Integrated Roads Information System. These nominated staff shall then be responsible for training other members of the Operating Company's staff as necessary in its use. The Operating Company shall ensure that all nominated staff attend such training at the dates and times notified in writing by the Director.
- 1.1.13 The Operating Company is responsible for providing any additional training and ensuring that the Integrated Roads Information System is used in accordance with this Contract.

## **2. TRUNK ROAD NETWORK REFERENCING AND UPDATING**

### **2.1 Network Reference Requirements**

- 2.1.1 The Trunk Road network is defined by way of a linear network referencing system using a series of links and sections dividing each route into identifiable lengths for

management purposes. Each link and section has attributes defining its location, road characteristics and shape and is marked by sets of studs installed on the road. All Trunk Road data including Defects, treatments, inventory, condition data, accidents and any other relevant data are fitted to this network referencing system. This data is referenced by their link, section and chainage from the network node point and by Ordnance Survey grid reference co-ordinates.

**2.1.2 The Director is responsible for:**

- (i) defining the Trunk Road network and its attributes in the Integrated Roads Information System,
- (ii) assigning link and section numbers and node points to the Trunk Road network, and
- (iii) updating the Integrated Roads Information System,

when changes occur to the Trunk Road network, attributes and data.

The Trunk Road network referencing system is held by the Director and supplied to the Operating Company on the Integrated Roads Information System. The Operating Company shall ensure that the network referencing system is used in all of its systems which reference data to the Trunk Road network.

**2.2 Schemes Requiring Network Updates**

**2.2.1 Updates to the Trunk Road network referencing system are necessary when the geometric alignment of a road changes.**

Changes include major realignments such as new motorways or bypasses of communities and also less extensive changes such as:

- (i) on-line dualling,
- (ii) new junction layouts,
- (iii) roundabouts,
- (iv) bend straightening, and
- (v) any other change where the new alignment deviates by 300 millimetres from that currently recorded in the Trunk Road network referencing system.

Other changes to the Trunk Road may affect the characteristic of a road although the geometric alignment may remain unaltered. Changes to the characteristics of a road include:

- (i) addition of a climbing Lane,
- (ii) carriageway or Lane widening,
- (iii) changes in Lane allocation or junction layouts,
- (iv) bridge or culvert extensions, and
- (v) other features affecting the use and maintenance of the Trunk Road.

**2.2.2 The Operating Company shall implement processes to ensure that any change to the geometric alignment or characteristic of a Trunk Road within the Unit is identified.**

Sources of potential change may include:

- (i) Schemes promoted by the Operating Company such as minor improvement Schemes,
- (ii) improvement schemes promoted by the Scottish Government such as bypasses and major improvement projects,
- (iii) Schemes promoted by third parties as referred to in Schedule 8 Part 2, and
- (iv) errors and discrepancies in the current network referencing.

2.2.3 No later than six months after Commencement of Service Date 1, the Operating Company shall ensure that the Integrated Roads Information System network referencing accurately reflects the physical road network characteristics. Any such characteristics, as detailed in paragraph 2.2.1 of this Part shall be identified using the update process and forms provided in Annex 4.2/C of this Part.

## **2.3 Information Required for Network Reference System Changes**

2.3.1 Where, as a result of Operations, Works or any other work by third parties, changes of geometric alignment or characteristics necessitate updates to the Trunk Road network referencing system, the Operating Company shall, referring to the update process and using the forms provided in Annex 4.2/C of this Part, instigate the update process by submitting a network change sheet to the Director. Where an error is identified, the Operating Company shall submit a network error sheet to the Director.

Complete data shall be provided by the Operating Company at least four weeks before commencement of construction work to allow the changes to be implemented.

2.3.2 The following information shall be provided by the Operating Company to the Director for each Scheme identified, during the update process, to ensure that the changes required can be assessed, node markers installed and the Trunk Road network referencing system updated:

- (i) Scheme layout plans at 1:2500 scale which shall include the Scheme chainages for each carriageway in the Scheme at the tie-in points to the existing road,
- (ii) proposed new or revised network node locations (if applicable),
- (iii) Scheme construction, commencement and completion dates. The date when traffic first starts using the road in a temporary traffic management contra-flow or other temporary traffic management situation before Scheme construction has been completed shall also be provided,
- (iv) carriageway specification and the number of Lanes for each new section,
- (v) once the revised (Scheme) network has been notified to the Operating Company by the Director, the Operating Company shall within 25 Working Days provide to the Director:
  - (a) a completed 'Maintenance Scheme Data Sheet', to the format shown in Annex 4.2/A of this Part, and



- (b) Sideways Co-efficient Routine Investigation Machine ("SCRIM")  
Site categories to the format shown in Annex 4.2/B of this Part,  
for the Scheme, based relative to the new network referencing, and
- (vi) once the network node locations have been advised in writing by the Director and node markers installed, details for each Scheme as follows:
  - (a) measured lengths for each new network section including those comprising existing or new road,
  - (b) measured chainage of the start and end of the new Scheme related to the existing network referencing,
  - (c) Ordnance Survey grid references for each installed network node point which shall be provided as 12 figure references and shall be accurate to plus or minus one metre, and
  - (d) node marker reference replacement documents to the format shown in Annex 4.2/E of this Part.

The Operating Company shall:

- (i) notify the Director of any Scheme, change in characteristic or potentially required changes to the Trunk Road network within the Unit and provide data as referred to in paragraphs 2.3.1 and 2.3.2 of this Part,
- (ii) ensure that all Operating Company systems use the most up-to-date network referencing system,
- (iii) maintain all road studs as referred to in Schedule 7 Part 1, and
- (iv) notify the Director of:
  - (a) any error, inaccuracy or discrepancy in the Integrated Roads Information System,
  - (b) the reason for such error, and
  - (c) the proposed correction for consideration by the Director.

## **2.4 Inventory Requirements**

- 2.4.1 The Integrated Roads Information System made available for the Operating Company will include a facility to access an historic inventory for that part of the Unit formerly the responsibility of FETA. Within six months of Commencement of Service Date 1, the Operating Company shall review and update this historic inventory.
- 2.4.2 The Operating Company shall add new inventory items and amend existing inventory items in the Integrated Roads Information System to accurately reflect the inventory on Network 2. The additions and amendments shall be completed within six months of receipt of as-built information from the Director.
- 2.4.3 The Operating Company shall:
  - (i) maintain the accuracy and integrity of all inventory data as defined in the Transport Scotland *Inventory Collection Manual*,
  - (ii) add new inventory items and end-date old items as the inventory changes, and

- (iii) add missing inventory records for current inventory items.

## **2.5 Inspection and Maintenance Requirements**

2.5.1 The Director is responsible for defining the types of inspections and maintenance to be recorded by the Operating Company in the Integrated Roads Information System.

2.5.2 The Operating Company shall:

- (i) design its inspection and maintenance routes,
- (ii) create and maintain its routes in the routine maintenance and management function of the Integrated Roads Information System,
- (iii) enter details of all inspections, Defect rectification and maintenance activities undertaken, and
- (iv) record all required data and attributes in the routine maintenance and management function of the Integrated Roads Information System.

2.5.3 The Operating Company shall ensure that the routine maintenance and management function of the Integrated Roads Information System data supports the evidence required for fatal accident inquiries and the consideration of damages claims by third parties. The Operating Company shall maintain and ensure the accuracy and integrity of the routine maintenance and management function of the Integrated Roads Information System data at all times including all inventory, Category 1 and Category 2 Defects and all inspections and maintenance carried out on the Trunk Roads within the Unit.

2.5.4 The Operating Company shall include procedures in the Management System for the validation of all data for correctness and completeness before entering the data into the routine maintenance and management function of the Integrated Roads Information System. Any error or omission in the routine maintenance and management function of the Integrated Roads Information System data found by the Operating Company shall be corrected within four Working Days of its discovery.

## **3. PAVEMENT MANAGEMENT FUNCTIONALITY OF THE INTEGRATED ROADS INFORMATION SYSTEM FEATURES**

3.1.1 The Director will populate the pavement management function of the Integrated Roads Information System module with the following:

- (i) road condition data including as a minimum:
  - (a) SCANNER survey data,
  - (b) Sideways Co-efficient Routine Investigation Machine ("SCRIM") survey data, and
  - (c) deflectograph survey data,
- (ii) derived traffic flow data from the Traffic Scotland Systems Contractor's database,
- (iii) accident data, and
- (iv) road construction data.

3.1.2 Survey contractors employed by the Director shall undertake road condition surveys.

The Director will notify the Operating Company in writing of the programme of routes and types of survey to be undertaken on the Unit each year during Service Delivery Period 1 and Service Delivery Period 2. Notification will be provided at least one month before the start of the annual survey cycle.

- 3.1.3 The Director's survey contractors will liaise directly with the Operating Company informing it of dates and types of survey to be, or being, undertaken on the Trunk Road network. The Operating Company shall liaise with such survey contractors when necessary for traffic management and other safety purposes.
- 3.1.4 The Operating Company shall analyse and interpret the pavement management function of the Integrated Roads Information System data to identify structural pavement maintenance Schemes.
- 3.1.5 The Operating Company shall utilise the Scheme manager function of the Integrated Roads Information System module of the Integrated Roads Information System with details of all structural pavement maintenance Schemes in its draft maintenance programmes as referred to in Schedule 4 Part 1.

The progress of each Scheme, as referred to in Schedule 4 Part 1, shall be updated by the Operating Company in the Scheme manager function of the Integrated Roads Information System within five Working Days throughout Service Delivery Period 1 and Service Delivery Period 2.

- 3.1.6 A Statement of Intent and Value for Money Assessment as referred to in Schedule 4 Part 1 shall be attached to each Scheme record by the Operating Company.

The category of the Scheme will be entered by the Director.

- 3.1.7 As part of the requirements for completion of a Scheme which includes repair, replacement or change of an area of carriageway greater than 30 metres in length and of width not less than half of the Lane width, the Operating Company shall produce a maintenance Scheme data sheet for that area.

If more than one specification for repair, replacement or change is adopted within the area, the Operating Company shall produce a structural pavement maintenance Scheme data sheet for each specification that is adopted. Submission shall be made on the basis of one submission per Scheme with separate sheets identified by chainage for each specification. The following filenaming convention shall be used "MSD\_YYYY\_XXXX\_ZZZZ", where:

- (i) YYYY = year e.g. 1314 for Financial Year 2013/2014,
- (ii) XXXX = route e.g. A90,
- (iii) ZZZZ = Scheme name/location e.g. Echline, and
- (iv) example filename = "MSD\_1314\_A90\_Echline".

- 3.1.8 The Operating Company shall prepare maintenance Scheme data sheets in the form referred to in Annex 4.2/A of this Part. Such maintenance Scheme data sheets shall contain sufficient data to identify uniquely the location and extent of the area of repair, replacement or change with respect to the linear network referencing system. Following Scheme approval, there may be a requirement to adjust a Scheme on Site. On such occasions an explanation for change form, provided in Annex 4.2/D of this Part, shall be submitted with the maintenance Scheme data sheet.

The Operating Company shall submit maintenance Scheme data sheets where pavement investigations indicate there is a substantial difference between the existing construction layers and those recorded in the Integrated Roads Information System and where the difference is likely to influence the interpretation of deflectograph data.

The Operating Company shall submit maintenance Scheme data sheets to the Director within 25 Working Days of substantial completion of the related repair, replacement, change or Site investigation.

#### **4. ROUTINE MAINTENANCE AND MANAGEMENT FUNCTION OF THE INTEGRATED ROADS**

##### **4.1 Information System Features**

4.1.1 The routine maintenance and management function of the Integrated Roads Information System data can be accessed, interrogated and retrieved using one or more of the following methods:

- (i) map based presentation of data,
- (ii) fixed reports, and
- (iii) user defined reports.

4.1.2 The fixed reports shall include as a minimum:

- (i) Category 1 Defects and Category 2 Defects,
- (ii) Category 1 Defect repair performance,
- (iii) Safety Inspection performance,
- (iv) Safety Patrol performance,
- (v) Detailed Inspection performance, and
- (vi) maintenance performance.

4.1.3 The user defined reports enable users to create queries concerning the Integrated Roads Information System data and to save the data in a text format.

The Operating Company shall use the routine maintenance and management function of the Integrated Roads Information System to record details and evidence of its activities until the Service End Date, including as a minimum:

- (i) completed inspection checklists and Certificates,
- (ii) evidence of activities being carried out with before and after photographs,
- (iii) photographic evidence of all Category 1 Defects and appropriate Category 2 Defects,
- (iv) photographic evidence of Defect repairs for all Category 1 Defects and appropriate Category 2 Defects,
- (v) inventory design information, and
- (vi) photographs of inventory items for all items required by the Transport Scotland *Inventory Collection Manual* and where appropriate for other items.

This is Annex 4.2/A to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and Amey LG Limited.

**SCOTTISH MINISTERS' REQUIREMENTS**

**SCHEDULE 4 PART 2**

**INTEGRATED ROADS INFORMATION SYSTEM**

**ANNEX 4.2/A – Maintenance Scheme Data Sheet**



SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/A – Maintenance Scheme Data Sheet



MAINTENANCE SCHEME DATA FORM V 1.7, Sep 2012

Unit

?

Enter Unit name

Route

Work code

Scheme Name

Scheme number

Date Works completed

Lane Number(s)

ENTER LANE NUMBER(S) FOR THIS TREATMENT. SEPARATE SHEETS SHOULD BE USED FOR DIFFERING TREATMENTS UNDER AN OVERALL SCHEME

Single carriageway 2 lane  
CL1 - with flow left hand lane  
CR1 - with flow right hand lane

Dual carriageway / Motorway  
-L1 - offset lane left  
CL1 - left hand (slow) lane  
subsequent lanes increase number by 1 e.g.  
CL2 - centre lane of 3 lane motorway or overtaking lane of 2 lane dual

Start link / section

End link / section

Thickness of material removed (milling or planing depth)

link and section in the format 12345/12

link and section in the format 12345/12

Thickness of material removed for Inlay schemes or Inlay sections of other schemes

Start chainage

End chainage

LEVEL	LAYER	TREATMENT TYPE	MATERIAL SPECIFICATION	MATERIAL TYPE	MIXING TEMP	% RECYCLED	MATERIAL THICKNESS (mm)	BINDER TYPE	BINDER SPECIFICATION	GRADING/ TEXTURE	TYPE OF AGGREGATE	NOMINAL SIZE OF AGGREGATE	PSV	MATERIAL SOURCE		
														PRIMARY	SECONDARY	BACKUP
0	Surface Treatment (if any)	?	?	?	?			?	?	?	?	?		?	?	?
1	Surface	?	?	?	?			?	?	?	?	?		?	?	?
2	Binder	?	?	?	?			?	?	?	?	?		?	?	?
3	Base	?	?	?	?			?	?	?	?	?		?	?	?
4	Sub base	?	?	?												
Additional layers (Regulating, Reinforcement, SAMI etc)																
??	?	?	?	?	?			?	?	?	?	?		?	?	?
??	?	?	?	?	?			?	?	?	?	4		?	?	?

Design Life

Outturn Cost

Additional Info / Comments

Treatment statistics

	Recon	Overlay	Inlay	Surface	Anti skid
Work code	101	102	103	104	105
Lane / kms					
Area sq. m					

For Operating Company

MSD Completed by

MSD Checked by

Date MSD supplied to TS

Type name of person completing the form at the OC

Type the name of the person checking the form at the OC

Enter date sent to TS

For Transport Scotland

MSD Checked by

Date MSD passed to AM

IRIS Updated by

Type name of person checking the form at TS

Date sent to AM MAILBOX

NEW CONSTRUCTION SCHEME DATA FORM    V 1.7, Sep 2012

Unit 

Enter Unit name

Route

Work code

Scheme Name

Scheme number

Date Works completed

Lane Number(s)

Start link / section

Start chainage

ENTER LANE NUMBER(S) FOR THIS TREATMENT.  
SEPARATE SHEETS SHOULD BE USED FOR DIFFERING  
TREATMENTS UNDER AN OVERALL SCHEME

Single carriageway 2 lane  
CL1 - with flow left hand lane  
CR1 - with flow right hand lane

Dual carriageway / Motorway  
-L1 - offset lane left  
CL1 - left hand (slow) lane  
subsequent lanes increase number by 1 e.g.  
CL2 - centre lane of 3 lane motorway or overtaking lane of 2  
lane dual

End link / section

End chainage

Thickness of material removed (milling or planing depth)

?

Insert scheme name from  
Scheme Manager

Enter CCMS scheme no.

link and section in  
the format  
12345/12

link and section in  
the format  
12345/12

Thickness of material removed  
for inlay schemes or inlaid  
sections of other schemes

LEVEL	LAYER	TREATMENT TYPE	MATERIAL SPECIFICATION	MATERIAL TYPE	MIXING TEMP	% RECYCLED	MATERIAL THICKNESS (mm)	BINDER TYPE	BINDER SPECIFICATION	GRADING/ TEXTURE	TYPE OF AGGREGATE	NOMINAL SIZE OF AGGREGATE	PSV	MATERIAL SOURCE		
														PRIMARY	SECONDARY	BACKUP
0	Surface Treatment (if any)	?	?	?	?			?	?	?	?	?		?	?	?
1	Surface	?	?	?	?			?	?	?	?	?		?	?	?
2	Binder	?	?	?	?			?	?	?	?	?		?	?	?
3	Base	?	?	?	?			?	?	?	?	?		?	?	?
4	Sub base	?	?	?												
Additional layers (Regulating, Reinforcement, SAMI etc)																
??	?	?	?	?	?			?	?	?	?	?		?	?	?
??	?	?	?	?	?			?	?	?	?	4		?	?	?

Design Life

Outturn Cost

Additional Info /  
Comments

Add a comment to advise of any material type, specification, material source etc that are not in the list.

Treatment statistics

	Recon	Overlay	Inlay	Surface	Anti skid
Work code	101	102	103	104	105
Lane / kms					
Area sq. m					

For Operating Company

MSD Completed by

MSD Checked by

Date MSD supplied to TS

Type name of person completing the form at the OC

Type the name of the person checking the form at the OC

Enter date sent to TS

For Transport Scotland

MSD Checked by

Date MSD passed to AM

IRIS Updated by

Type name of person checking the form at TS

Date sent to AM MAILBOX



This is Annex 4.2/B to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and Amey LG Limited.

**SCOTTISH MINISTERS' REQUIREMENTS**

**SCHEDULE 4 PART 2**

**INTEGRATED ROADS INFORMATION SYSTEM**

**ANNEX 4.2/B – Notification of SCRIM Category for Network Update Document**



**SCOTTISH MINISTERS' REQUIREMENTS****SCHEDULE 4 PART 2****INTEGRATED ROADS INFORMATION SYSTEM****ANNEX 4.2/B – Notification of SCRIM Category for Network Update Document****NOTIFICATION OF SCRIM INVESTIGATORY LEVEL****NEW CONSTRUCTION / NETWORK UPDATE**

Unit  Route  Date supplied to TS

Scheme Name   
(if new scheme) Date works complete   
(if new scheme)

Lane No	Start link/sect	Start chainage	End link / section	End chainage	SCRIM Category
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
9	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
13	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
14	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

COMPLETED BY  CHECKED BY

COMPLETED BY  CHECKED BY

SERIS UPDATED BY  DATE



This is Annex 4.2/C to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and Amey LG Limited.

**SCOTTISH MINISTERS' REQUIREMENTS**

**SCHEDULE 4 PART 2**

**INTEGRATED ROADS INFORMATION SYSTEM**

**ANNEX 4.2/C – Network Update Process, Network Change Form and Network Error Form**

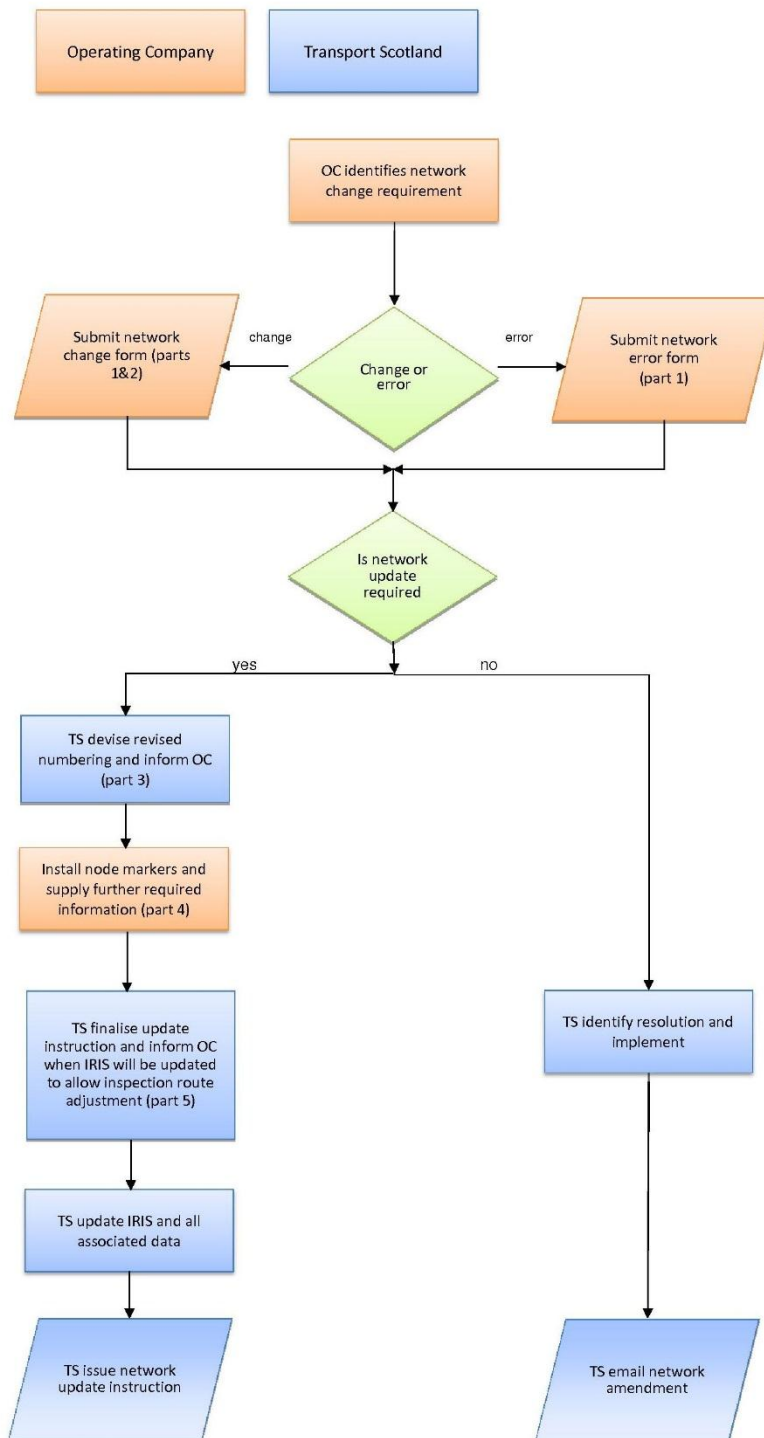


## SCOTTISH MINISTERS' REQUIREMENTS

### SCHEDULE 4 PART 2

### INTEGRATED ROADS INFORMATION SYSTEM

#### ANNEX 4.2/C – Network Update Process, Network Change Form and Network Error Form



## NETWORK CHANGE FORM

Version 1.2, 22 October 2013



## 1 GENERAL

Submitted by  Name of person submitting the notification Date  Insert date of submission

Unit  Insert Unit name Route  Insert route number Sections  Insert section number(s) affected

Location  Insert scheme name where applicable

Reason for change  Insert the reason for the proposed network change : Major scheme, minor scheme, roundabout, etc

Details of proposed correction  Enter details of the proposed correction in general terms

## 2 INFORMATION SUPPLIED BY OPERATING COMPANY

	Check	Date	
Scheme layout plans at 1:2500 as detailed in Schedule 4 Part 2	<input type="checkbox"/>	<input type="text"/>	Note: relevant plans should be submitted at least 4 weeks prior to scheme opening
Estimated opening date of scheme	<input type="checkbox"/>	<input type="text"/>	

## 3 TRANSPORT SCOTLAND FEEDBACK

New referencing sections and node locations devised / agreed	<input type="checkbox"/>	<input type="text"/>
Operating Company informed of section numbers and node locations	<input type="checkbox"/>	<input type="text"/>

## 4 OPERATING COMPANY FURTHER INFORMATION SUPPLIED

Node markers installed	<input type="checkbox"/>	<input type="text"/>
Measured lengths for each new network section	<input type="checkbox"/>	<input type="text"/>
Measured chainages of existing sections at the start & end of the new scheme	<input type="checkbox"/>	<input type="text"/>
12 figure OSGR for each installed network node accurate to 1 metre	<input type="checkbox"/>	<input type="text"/>
Plan of Trunk Road boundary definition	<input type="checkbox"/>	<input type="text"/>
Pavement construction data (NCSD)	<input type="checkbox"/>	<input type="text"/>
Scrim site category data	<input type="checkbox"/>	<input type="text"/>
Node marker location document	<input type="checkbox"/>	<input type="text"/>

## 5 TRANSPORT SCOTLAND NETWORK UPDATE

Network update instruction finalised	<input type="checkbox"/>	<input type="text"/>
IRIS updated	by	<input type="text"/>
Network update instruction issued	to	<input type="text"/>



## NETWORK ERROR FORM

**1 GENERAL**

Submitted by  Name of person submitting the notification Date  Insert date of submission

Unit  Insert Unit name Route  Insert route number Sections  Insert section number(s) affected

Location  Insert scheme name where applicable

Reason for change / error  Insert the reason for the change or error

Details of proposed correction  Enter details of the proposed correction in general terms

**2 TRANSPORT SCOTLAND ACTION**

Network update instruction required ☐ Date

Proposed TS resolution  Insert details of the proposed solution

TS action taken  Insert details of actual solution

**3 TRANSPORT SCOTLAND NETWORK UPDATE / AMENDMENT**

Network update instruction or amendment finalised

IRIS updated by

Network update instruction issued to

or Network amendment emailed to

## NETWORK CHANGE / ERROR FORM NOTES

### Network Change

#### 1 GENERAL

The OC submits part 1 identifying the location on the network which may require a numbering change due to a change in characteristic. The reason for change and proposed correction are included.

#### 2 INFORMATION SUPPLIED BY OC

The OC supplies scheme plans to enable TS to identify node locations and revise the referencing where necessary. Parts 1 and 2 are supplied together.

#### 3 TRANSPORT SCOTLAND FEEDBACK

TS devise / agree revised referencing and inform the OC of section numbers and node locations to be used.

#### 4 OPERATING COMPANY FURTHER INFORMATION SUPPLIED

The OC installs node markers, provides measured section lengths, the scheme start and end point chainages on existing sections, 12 digit OSGRs of node positions accurate to 1 metre, pavement construction data on the NCSD form, new SCRIM categories on the SCRIM category notification form and the node marker location document.

#### 5 TRANSPORT SCOTLAND NETWORK UPDATE

TS finalise the network instruction, advise the OC when the update to IRIS with all the relevant data will be done and issue the instruction when this is complete.

### Network Error

#### 1 GENERAL

As per Network Change

#### 2 TRANSPORT SCOTLAND ACTION

TS decide if a network update instruction is required and formulate the resolution to the error then record what action was taken.

#### 3 TRANSPORT SCOTLAND NETWORK UPDATE

TS finalise the network instruction (if necessary), advise the OC when the update to IRIS will be done and issue the instruction or email the amendment when this has been done.

This is Annex 4.2/D to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and Amey LG Limited.

**SCOTTISH MINISTERS' REQUIREMENTS**

**SCHEDULE 4 PART 2**

**INTEGRATED ROADS INFORMATION SYSTEM**

**ANNEX 4.2/D – Explanation for Change Form**



## SCOTTISH MINISTERS' REQUIREMENTS

### SCHEDULE 4 PART 2

### INTEGRATED ROADS INFORMATION SYSTEM

#### ANNEX 4.2/D – Explanation for Change Form



#### EXPLANATION FOR CHANGE SOI - MSD

Date supplied to FB

Unit

Route

Work code

Scheme number

Scheme Name

Details of change from approved SOI

Explanation



This is Annex 4.2/E to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and Amey LG Limited.

**SCOTTISH MINISTERS' REQUIREMENTS**

**SCHEDULE 4 PART 2**

**INTEGRATED ROADS INFORMATION SYSTEM**

**ANNEX 4.2/E – Design for Node Marker Reference Replacement**





## SCOTTISH MINISTERS' REQUIREMENTS

## SCHEDULE 4 PART 2

## INTEGRATED ROADS INFORMATION SYSTEM

## ANNEX 4.2/E – Design for Node Marker Reference Replacement

## Schedule 4 Part 2 Node Positioning

Section Attributes:						
Route	A77	Unit	SW	Section Codes	end node of	11638/05
					start node of	11638/20
Section Type	Single Carriageway			Section Length		1183
Section Description	A77: Bankhead Rbt to End of Climbing Lane					

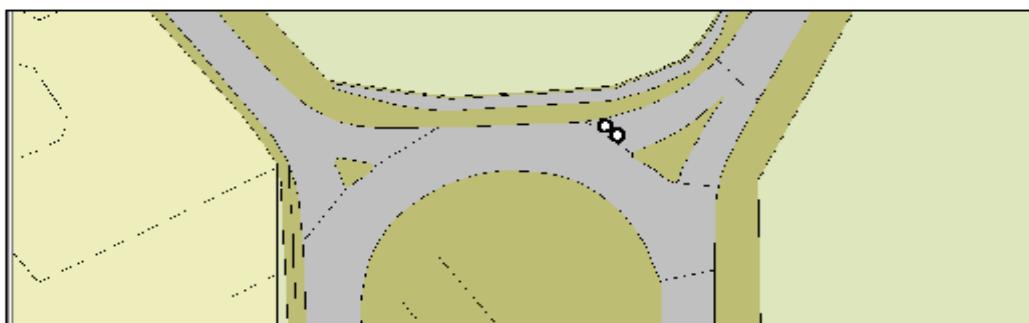
Design:	
Node Type	2 Thermoplastic core nodes
Node Event Type	Roundabout



Site Image



Location



Site Plan

Advisory Update to Data (Changes to section)				
Revised Section Length	1183m	OSGR	Easting	235492
			Northing	619330
Revised Section Description				
Notes				
Location submitted by: Name/Signature		Date		
Location agreed by TS: Name/Signature		Date		
Data update complete: Name/Signature		Date		

