# Elgin roadworks.org Portal Service Specification

***August 2014 Version***

## 1 Overview

This document provides a non-technical summary of the functional components of the Elgin roadworks.org Portal service.

The Elgin roadworks.org Portal is a cloud based data publication and syndication system for traffic and travel and related highways information. It consists of the following subsystems:

1.1 Website. The roadworks.org website has a map based user interface for displaying a variety of datasets including roadworks, temporary traffic management interventions, live road traffic incidents and highways assets.

1.2 Data subsystem. Replication of roadworks data between Customer streetworks systems and roadworks.org is accomplished using an adaptor application installed within Customer's environment. Data transmission is via XML web services.

## 2 Premium and Lite Versions

Two levels of functionality are available to Local Authority Customers: Lite and Premium. Both versions are accessible through the roadworks.org website, with the level of information being displayed to users dependant on the version adopted by the Local Authority.

2.1 roadworks.org Portal Lite Version supports the following data layers:

- Current or "in progress" roadworks
- Live traffic incidents & accidents
- Google live traffic (congestion)

2.2 roadworks.org Portal Premium Version has all of the capabilities of the Lite version, and in addition supports the following features and data layers:

- Web "widget" embeddable within Customer's public website
- Roadworks information accessible on mobile web app
- Email alerts for planned roadworks, road closures and other interruptions
- Planned roadworks
- Forward Planning roadworks
- Restriction information (Section 58s & 58As)
- Events and non-streetworks activities
- Bus stops, train, tram and Tube stations with scheduled departure information
- National Street Gazetteer & ASD
- Winter gritting routes
- Traffic sensitive routes
- HGV routes
- Bridges

2.3 The following data layers are currently in Beta and are not formally supported, but may be available in some areas:

- Live bus, train, tram and Tube departure times

## 3 Website Functionality

There are four principle areas of functionality:

- Map
- Journey planning
- Email alerts
- Roadworks search

### 3.1 Map

The map enables users to view live traffic information, incidents, roadworks and other highway related information. The map uses Google Maps API and has all the features of a dynamic interactive web based map including zoom and pan tools, map search, layer control and legend.

The map search tool enables users to search for a place, postcode, or administrative area (parish, ward, electoral division, etc).

When the user clicks on a roadworks icon or other feature, summary information is overlaid on the map. Roadworks data is segmented into 3 levels of likely impact to the road user, displayed using a red / amber /green colour scheme.

### 3.2 Journey planning

When searching for a destination using the map search tool the user can plot a route by road or public transport. This feature is powered by the Google Directions API.

### 3.3 Email alerts

Users can subscribe to email alerts by specifying a geographic area and selecting the type of information required (roadworks, road closures, etc) and specifying the alert frequency (daily, weekly or monthly).

### 3.4 Roadworks search

A detailed roadworks search tool is also available. This is intended for streetworks operational purposes. Works can be filtered by the following parameters:

- Date range
- Traffic impact
- Obstruction type
- Area
- Road
- Advanced options

## 4 Embedding and Linking to the Roadworks Portal

Customers of roadworks.org Premium are able to embed the roadworks.org website as a self-contained “widget” into their own public website pages. A simple JavaScript embedding API enables parameters to be preset including the map centre point and zoom level and active map layers.

## 5 System Requirements

roadworks.org Portal has been developed with strict adherence to HTML5 standards and best practice. It supports all modern standards-compliant web browsers on PC and Mac and the majority of browsers on all mainstream mobile devices.

## 6 Roadworks Data Import

roadworks.org Portal relies on a regular automated data feed from Customer streetworks systems. Elgin provides a "roadworks.org SDEP Adaptor" to accomplish this. The Adaptor is installed within Customer's environment on the streetworks system server or any Windows computer with network and ODBC or equivalent access to the streetworks database. The Adaptor submits an SQL query to the streetworks register database on a scheduled basis. The query retrieves all roadworks data that has changed since the previous query. The data is transformed into XML and transmitted to the roadworks.org SDEP SOAP Web Service. The data schema and transport mechanisms conform to the Street Events Data Exchange Protocol (SDEP) National e-Standard (http://en.wikipedia.org/wiki/SDEP).

## 7 Further Information

Further information and technical specifications for functional components of the roadwork.org Portal can be provided on request.

Please contact us at info@elgin.org.uk