

Digital Countdown signs, syndicated data-feeds and private funding of roadside signs

1. Background

Countdown provides real-time arrival information (RTI) for buses for passengers throughout London. The system shows the order in which buses will reach a stop, their destinations and the number of minutes until their expected arrival. It also displays information about events and incidents affecting bus routes and other public transport modes. The system is the largest of its kind in the world

Passengers are able to access predicted bus arrival information for every one of the 19,000 plus bus stops and for 700 routes in London via the internet and mobile phones. This service is complemented by 2,500 roadside Countdown signs provided and funded by TfL which provide real time information at key bus stops in London.

Demand for bus RTI through roadside signs remains strong and expectations are rising of greater RTI availability throughout the transport network. The flexibility of the new Countdown system to utilise new information channels significantly widens availability and help address demand through a variety of channels. New technology GPRS based roadside signs facilitate easier installation of signs in shelters and the web services give the flexibility to provide bus arrival information over any web based channel, from mobile phones to large plasma screens.

2. Purpose of the document

This document outlines how external organisations, such as local authorities, train operators or commercial organisations, can obtain additional bus RTI for public display.

The broader range of delivery channels and new sign technology open opportunities for external organisations to provide bus arrival information in public locations, either through their own Visual Display Units in any location, by using the syndicated data-feeds to develop software and mobile phone 'apps', or by purchasing roadside Countdown signs for stops.

3. Options

There are three options open to external organisations for displaying public information:

- RTI in a Countdown sign format displayed on a screen via the web, known as a 'Digital Sign'
- Taking a syndicated data-feed from www.tfl.gov.uk/developers to use for display with their own data or to develop software
- A roadside sign displaying RTI on a bus shelter

4. Digital Signs

TfL enables external organisations to display RTI to the public using their own display media, such as projection systems or ‘plasma’ style screens. These displays, known as Digital Signs, provide the opportunity to show RTI in different environments away from bus stops. They bring unique benefits, such as remote access to information before embarking on a journey and the ability to combine bus RTI with complimentary information, such as RTI for other transport modes.

4.1 Which locations are suitable for Digital Signs?

Examples of locations for Digital Signs include hospitals, town halls and libraries and for commercially owned locations, shopping centres, supermarkets and entertainment venues.

4.2 What information is displayed on a Digital Sign?

An organisation can apply to set up Digital Sign data that displays a stop, or series of stops serving a public facility (for this purpose, ‘public’ includes facilities not open to the general public, such as commercial office buildings). Each stop will display real time bus arrival predictions. Applicants will be able to select from a series of pre-defined Digital Sign designs displaying one or more stops on a page, together with a map showing their locations.

As such the sign can be thought of as having the purpose of a way-finding tool “which stop do I need” and an information tool “when is my bus coming”

Example Digital Sign

SA Southwark Station		
Route	Destination	Arrival
63	King's Cross	due
63	King's Cross	due
63	Clerkenwell Grn	2 mins
100	Shadwell	5 mins
100	Shadwell	7 mins
45	King's Cross	9 mins
63	King's Cross	10 mins
45	King's Cross	18 mins
63	Clerkenwell Grn	18 mins

Live Bus Information
15:40

SN Southwark Street / Blackfriars Road		
Route	Destination	Arrival
RVI	Covent Garden	7 mins
RVI	Covent Garden	19 mins
RVI	Covent Garden	29 mins

D Waterloo Station / Waterloo Road		
Route	Destination	Arrival
172	Brockley Rise	due
68	West Norwood	2 mins
59	Streatham Hill	3 mins
171	Bellingham	3 mins
68	West Norwood	4 mins
176	Penge	4 mins
59	Streatham Hill	8 mins
68	West Norwood	10 mins
171	Bellingham	11 mins

MAYOR OF LONDON

Transport for London

SB Southwark Station		
Route	Destination	Arrival
100	Elephant&Castle	due
63	Honor Oak	2 mins
63	Honor Oak	8 mins
45	Clapham Park	10 mins
100	Elephant&Castle	11 mins
63	Honor Oak	19 mins
100	Elephant&Castle	20 mins
45	Clapham Park	21 mins
63	Honor Oak	23 mins

4.3 Charging and application

Digital Signs will be made available to any organisation that requests a sign (public or private) that can provide the relevant technical requirements and who can support the operational cost.

An organisation requiring a Digital Sign will need to apply to Digisign.Countdown@tfl.gov.uk, providing location details of the prospective site.

TfL will validate the application with a short process to establish the location, stops to be included and technical capability. Once agreed by both parties, TfL will then organise and configure the map, data service and prediction data and provide a unique web link to be included in the organisations display.

The organisation will provide the site, the installed screen any necessary computer, internet connected hardware and communication link. The organisation will also be responsible for any relevant permissions, approvals and to take notice of appropriate guidelines with regards to viewing angles, brightness, lighting and other relative standards.

The Digital Sign service is currently provided free of charge. This is subject to review at the time of renewal, which takes place one year from when you subscribe to the service.

The cost of local electricity, maintenance and other software licences or communications charges will be born by the requesting organisation.

5. Syndicated data-feeds

Many organisations already have information displays, information services, data feeds and other ways of disseminating information and are seeking to expand the usefulness of this by taking RTI information from TfL. These organisations have their own information management capability/partners and are simply seeking the 'data' to merge into their applications.

TfL enables these organisations by supplying a functionally rich Application Program Interface (API).

The live bus arrival information API is a supported functional interface that provides details of bus arrivals for any stop or stops within the London Bus Network.

The data feed is provided free of charge but subject to our terms and conditions, and is one of a number of similar feeds described at www.tfl.gov.uk/developers. This website allows competent IT staff to register for the bus API service and to download the full specification and user guide for the feed that explains how the service can be used and gives examples of technical procedures for use.

Please note that the use of the API is subject to Terms and Conditions as detailed in www.tfl.gov.uk/terms.

6. Private Countdown sign requests

The requirements and conditions for accepting sign requests and a breakdown of costs required to support a Countdown sign are outlined below.

These signs will be of the same type and design as the TfL sign; yellow, LED, four line shelter signs, so from a passenger perspective, they will appear no different.

6.1 Private sign requests policy

In order for requests for signs to be accepted certain criteria need to be met:

1. Fully funded

Requests need to be fully funded by external parties. Only funding from new, external sources will be considered, for example Section 106 or private funding. LIPS funding, or funding through other parts of TfL will not be accepted. The agreement covers all costs associated with developing proposals, purchasing signs, installation and ongoing support.

2. Stop characteristics

The location must also be physically suitable and appropriate for a sign. Stop locations that are not considered suitable include sites:

- Which are not wheelchair accessible
- With no shelters,
- With a shelter that is not sign compatible,
- Without power,
- With insufficient power, e.g. Solar Power.

A sign requester may have the opportunity to cover the costs of meeting the cost of making a site Countdown compatible, i.e. make a site accessible, providing a new shelter, converting an incompatible shelter, or providing a new power supply.

- Which are at the very end of a route/s
- Which do not have a 'suitable' level of bus service provision at the stop. Signs at stops served by one route with a very low service frequency or boarder numbers are not deemed suitable. This is to ensure that signs benefit the most number of passengers.

Requests for signs located away from stops will be considered in very limited circumstances. A Digital Sign is likely to be better suited to environments away from the stop than a standard LED shelter mounted sign.

Other conditions apply, which are listed in the Appendix.

6.2 Private sign costs

The cost of a privately funded sign is £8,300 and includes the maintenance of a sign until 2021, which the requester will be required to cover as well. Signs are and will remain property of TfL.

The costs quoted cover signs at stops with shelters only. If signs are to be provided away from stops, then costs will be higher, and this may not always be possible.

Total maintenance and operating costs will be charged up front with the equipment costs.

7. Contact Details

Countdown@tfl.gov.uk

Appendix

3. Other conditions

To ensure that privately requested signs can successfully operate within the network of signs, the following conditions must apply.

- A sign will be leased from TfL, but the content, management and operation of the sign will be the responsibility of TfL.
- The organisation or individual leasing the sign will have no influence over any TfL policy or action, sign related or otherwise, as a result of leasing a sign.
- TfL reserves the right to determine sign positioning, information content and layout, text colour, use of audio etc. No advertising, electronic or posted can be designed into the sign by those leasing a sign.
- TfL reserves the right to refuse sign lease on the basis that the proposed site is physically unsuitable
- For all locations, the site must be accessible 24 hours, seven days a week for maintenance by TfL and its contractors.
- For away from stop locations, disability sign guidance requirements must apply throughout the lifetime of the agreement (eg no obstruction should be placed in front of the sign).
- Signs will not be made available for stops on new routes until new route proposals are firm. Funding will not be accepted until then.
- TfL is not liable for leased signs if route proposals do not go ahead as planned, or routes are withdrawn or altered (structure or frequency) as a result of a decision by TfL, or for an external reason (such as a road closure).
- TfL is not liable if another third party is able to request the removal of a sign from a stop or other location.
- TfL is not liable for any agreements made between third parties (including planning permission) that are dependent on securing a sign.
- Maintenance and operating costs for the lifetime of the sign will be charged up front with equipment costs. TfL will be unable to refund any of these costs as a result of early removal of a sign, whatever the reason for removal.
- All moves and other changes that are requested by the organisation or individual leasing the sign will be subject to a charge. This includes changing the sign for a Digital sign, or moving the sign due to redevelopment.