

# Proposed Schedule of Operating Conditions for LinkUK from BT Advertisement Screens

The technical specification of the advertisement screens are as follows.

## Screen

Panel Type :	LCD
Panel Size :	55 inch
Resolution :	1920(RGB)×1080 , FHD
Brightness :	2500 cd/m <sup>2</sup> (Typ.)
Contrast Ratio :	5000:1 (Typ.)
Display Colours :	16.7M (8-bit) , CIE1931 72%
Viewing Angle :	178/178 degrees
Lamp Type :	WLED

## Operating Conditions

Operating Temperature :	0 ~ 50 °C
Sunlight Readable :	Yes
Landscape or Portrait :	Landscape / Portrait (Link fixed in Portrait)

The specification is identical or comparable to those approved on Transport for London (TfL) digital bus shelter advertisements in London. Specifically, the viewing angle specifications would be identical to the TfL bus shelter screens. Oblique viewing angles can therefore accurately be assessed in practice by viewing existing TfL bus shelter digital screens.

The proposed usage regime for the screens has been set in accordance with Transport for London's (TfL) policy document '*Guidance for Digital Roadside Advertising and Proposed Best Practice – 2013*' [**the TfL Guidance**] and the conditions recommend by the Council at pre-app.

The recommended conditions from pre-app are as follows:

1. The intensity of the illumination of the digital sign shall not exceed 600 candelas per square metre between dusk and dawn in line with the maximum permitted recommended luminance as set out by 'The Institute of Lighting Professional's 'Professional Lighting Guide 05: The Brightness of Illuminated Advertisements'. The levels of luminance on the digital sign should be controlled by light sensors to measure the ambient brightness and dimmers to control the lighting output to within these limits.
2. The digital sign shall not display any moving, or apparently moving, images (including animation, flashing, scrolling three dimensional, intermittent or video elements).
3. The minimum display time for each advertisement shall be 10 seconds.
4. The interval between advertisements shall take place over a period no greater than one second; the complete screen shall change with no visual effects (including fading, swiping or other animated transition methods) between displays and the display will include a mechanism to freeze the image in the event of a malfunction.
5. No advertisement displayed shall resemble traffic signs, as defined in section 64 of the Road Traffic Regulation Act 1984.
6. The footway and carriageway on the Transport for London Road Network (TLRN) and Strategic Road Network (SRN) must not be blocked during the installation and maintenance of the advertising panel. Temporary obstruction during the installation must be kept to a minimum and should not encroach on the clear space needed to provide safe passage for pedestrians, or obstruct the flow of traffic.

In addition to the above, each proposal has been assessed against and would comply with the following additional criteria from the TfL Guidance.

- There would be no conflict with any traffic signs, signals, crossing points, schools, hospitals or low bridges.
- No sightlines or clearances would be affected.
- The TfL guidance states that 'Static digital advertising is likely to be acceptable in locations where static advertising exists or would be accepted.' There are existing traditional advertisement on similar sections of the respective roads in many cases.
- The geometry of the roads are not complicated and the driving conditions are not considered to be demanding or complicated.

- The advertisements would not be experienced by a driver in conjunction with any other similar digital advertisements.
- As per the TfL guidance, the advertisements would be located as close to the driver's natural eye line as possible and facing as head-on to the traffic as is practical.
- The lighting levels would be within the guidance contained in the Institute of Lighting Professional (ILP) Technical Note 5. Each display features ambient light sensors and automatic luminance adjustment. Dusk to dawn levels would be limited to 600 c/m<sup>2</sup> and daytime levels adjusted accordingly by automatic sensor as per the guidance, up to a maximum of 2500c/m<sup>2</sup>. This is in line with similar advertisements on TfL bus shelters in London.