

Date: 4 July 2018

Item: Connect PFI Transition

This paper will be considered in public

1 Summary

- 1.1 The purpose of this paper is to update the Committee on the status of the work being undertaken to provide for continuity of telecommunication services following the expiry of the Connect Private Finance Initiative Contract (Connect PFI) between London Underground (LU) and Citylink Telecommunications Limited (CTL).
- 1.2 A paper is included on Part 2 of the agenda which contains exempt supplementary information. The information is exempt by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it contains information relating to the financial or business affairs of TfL. It also contains legally privileged advice. Any discussion of that exempt information must take place after the press and public have been excluded from the meeting.

2 Recommendation

- 2.1 The Committee is requested to note the paper and the supplementary information on Part 2 of the agenda.**

3 Background

- 3.1 The Connect system is critical to the operation of the LU railway and provides:
- (a) voice radio between LU control centres, train drivers and station staff;
 - (b) fixed cable voice and data connections between stations (for example to carry CCTV traffic); and
 - (c) other signalling links and other links for a range of railway applications (for example TrackerNet, which displays train positioning information).
- 3.2 The Connect system provides safety features such as one person operated alarms and an 'open mic' mayday call function to be used in case of emergency.
- 3.3 The Connect PFI was awarded in 1999 to CTL, a special purpose vehicle specifically established to deliver the Connect services. CTL is a wholly owned subsidiary of CityLink Telecommunications Holdings Limited (CityLink Holdings).
- 3.4 CTL provides Connect asset management, operation and maintenance services. In practice this means CTL has full control over the Connect system to deliver against the output-based specification set out in the Connect PFI. Thales (a 33 per cent shareholder in CTL) is the delivery partner and undertakes all of these

services on behalf of CTL.

- 3.5 In line with industry-wide standards, the Connect system uses digital terrestrial trunked radio (TETRA) technology which, alongside other features, ensures security and confidentiality of sensitive data/voice communications. TETRA is a standard agreed by the EU in 1994 and is used extensively around the world for railway and airport operations.
- 3.6 Although TETRA has been dominant in transport operations it is expected that, in the longer term, European railway radio systems will use Long Term Evolution (LTE)/ 4G technology. The Connect radio system is highly integrated into LU train and railway systems and technological change would be a significant and costly undertaking. It is therefore our expectation that we will use TETRA-based solutions at least until the mid-2020's, at which point it is anticipated that the alternative technologies will be sufficiently developed to provide a viable solution.
- 3.7 The TETRA system used for Connect was supplied by Motorola using its Dimetra product. The version currently deployed within LU is Dimetra 6.1, which is now many versions behind the current offering. As a consequence, Motorola intend to stop supporting the LU implementation of Dimetra 6.1 once their commitment to the Connect PFI ends in November 2019.
- 3.8 The Connect system also comprises other elements of hardware and software, including both commercial off-the-shelf products and bespoke equipment or software designed specifically for the system.

4 Approved strategy

- 4.1 Our strategy (which was endorsed by the Committee in December 2017) is to continue operating the Connect system beyond the expiry of the Connect PFI. This will be done under new contractual arrangements that will provide operation and maintenance services for a limited period of time, as well as a series of system upgrades and asset refreshes to ensure the ongoing availability and stability of the Connect service.
- 4.2 Additional information regarding the execution of the strategy is included in the paper on Part 2 of the agenda.

5 Assurance

- 5.1 We are working with TfL Project Assurance and IIPAG to address any issues and final assurance reports will be submitted when we seek formal approvals.

6 Next Steps

- 6.1 We propose to close out our assurance review and seek appropriate approvals through a Chair's action based on the key terms and principles set out in the paper on Part 2 of the agenda.

List of Appendices to this paper:

Exempt supplementary information is included in a paper on Part 2 of the agenda.

List of background papers:

None

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