

Finance Committee



Date: 18 October 2017

Item: **Connect: A Managed Transition from the PFI**

This paper will be considered in public

1 Summary

- 1.1 The purpose of this paper is to brief the Finance Committee on the work currently 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 in 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. 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 asked to note the paper and the supplementary information in Part 2 of the agenda.**

3 Background

- 3.1 Since very early in its operation, LU has provided telecommunication facilities to train operators and station staff so that they can communicate with control centres. For many decades these services were provided by means of a tunnel telephone: essentially two exposed wires to which a train operator could hook a telephone on to in the event of an emergency. Station staff communications were via standard telephone systems. In the 1970s an analogue radio system called “Storno” was provided which effectively became life expired in the early 1990s.
- 3.2 In the 1990s an initiative started to provide new digital voice radio systems that did not rely on the existing radio and telephone services and provided more modern features, such as group calling. There was also increased demand for data transmission from CCTV applications as well as for transmitting a growing quantity of other types of data.
- 3.3 In line with the prevailing investment approach of the time, these new services were procured through a PFI contract. Procurement started in 1994 along with two others that would also result in PFI contracts. The other two – Prestige for fare collection systems and Power for power distribution systems – were signed in 1998. The Connect PFI was signed in 1999 for a 20 year term expiring on 21 November 2019.
- 3.4 The resulting Connect system is critical to the operation of the railway and

provides:

- (a) voice radio between LU control centres and train drivers;
- (b) fixed cable voice and data connections between stations (for example CCTV); and
- (c) other signalling links and other links for a range of railway applications (for example TrackerNet, which displays train positioning information).

3.5 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. This system has become even more important as a result of recent security incidents on the network.

3.6 The Connect PFI contract was awarded to a consortium, CTL, a special purpose vehicle specifically established to deliver the services. CTL is a wholly owned subsidiary of CityLink Telecommunications Holdings Ltd (CityLink Holdings). Over the years the shareholding structure in CityLink Holdings has gone through changes, with three shareholders now remaining, as set out in **Table 1** below.

Table 1 - Original and Current Shareholders of CityLink Holdings

Shareholder	Original %	Current %
Fluor	18.0%	-
Motorola	10.0%	-
Thales (Racal)	33.0%	33.0%
IIHL*	19.5%	33.5%
Palio (NO 12)**	19.5%	33.5%
Total	100.0%	100.0%

* Infrastructure Investment Holdings Ltd, a subsidiary of John Laing Group

** Subsidiary of Infrared Capital Partners

3.7 CTL provides 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.

3.8 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. 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 system is highly integrated into the train and railway systems and technological changes would be a significant and costly undertaking.

3.9 The TETRA system used for Connect was supplied by Motorola using its Dimetra product. The version currently deployed within LU is Dimetra 6.1.

3.10 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.

- 3.11 As part of the Connect PFI expiry process CTL are required to deliver an asset Reversion Report in November 2017, detailing the condition and remaining useful life of assets on the Connect system, and the work required to be carried out by CTL in order to transfer the assets and system back to TfL on expiry in the condition required by the Connect PFI.

4 Proposed strategy

- 4.1 The proposed strategy is to continue operating the Connect system following the Connect PFI expiry under new arrangements for operation and maintenance for a limited period.
- 4.2 Additional information on the proposed strategy is included 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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