



Subway Optical Transport Network - award of maintenance support contract

Date of meeting 28 September 2018

Date of report 11 September 2018

Report by Senior Director

1. Object of report

The recommend the Partnership approve the award of the Optical Transport Network (OTN) maintenance support contract for SPT to Siemens Mobility Limited.

2. Background

Optical Transport Network is the fibre communications backbone for SPT Subway. The 15 stations and the depot are connected in a ring configuration with an interface to the bus and corporate sites. The voice and data services are carried on a multimodal fibre operating over 2 fibres forming a dual ring; this provides redundancy provision within the system in the event of a fibre break. The OTN operates as a multiplexer, voice and data services are connected to cards inside the multiplexer chassis.

The typical services carried over the optical fibre network are:

- Traction Control Systems
- Signalling Control Systems
- Automatic Train Operation System (ATO)
- Critical Systems status and alarm indications

In addition to these essential operational services, the network also interfaces with the following:

- CCTV
- Telephony systems

The OTN is essential to the running of the Glasgow Subway as the failure of this network would cause the Subway to cease running. The maintenance and repair contract is essential to ensure the continuation of Subway service.

Siemens Mobility Limited has maintained the OTN since it was installed in 1994. When it was installed it had an operational life of 20 years, therefore this should be classed as a legacy infrastructure which requires life extension maintenance. The continuity of Siemens Mobility Limited expertise and service is essential. SPT shall be entering an operational phase of change which will see the new rolling stock and the overlay integrated system

being installed. It is critical that the existing infrastructure is maintained and does not cause operational issues with the new rolling stock.

SPT has an existing contract with Siemens Mobility Limited that expires in September 2018 which includes the option of a further 12 months. In order to align existing system maintenance with the introduction of the rolling stock and associated signalling systems, the decision was taken not to exercise the 12-month extension option and therefore SPT entered into contract negotiations with the supplier to establish the opportunity of entering into a new contract for a four-year period, which is the current estimated time for full introduction of new rolling stock and associated signalling equipment.

3. Outline of proposals

3.1 Scope of service

In order to support the OTN a contract must be in place with a provider who is expert in this obsolete technology.

The main contractual requirements for SPT are:

- 24/7 call out support on all remedial maintenance of SPT's Optical Transport Network (OTN)
- Preventative inspection and maintenance of SPT's OTN
- Resolution of issues

3.2 Procurement process

This requirement value is less than The Utilities Contracts (Scotland) Regulations 2016 threshold, therefore the OJEU rules do not apply. However, the value is above the Procurement Reform Act 2014 threshold, therefore these regulations apply. This requirement is exempt from competition due to the proprietary nature of the network. As noted in section 2, this infrastructure was designed and installed by Siemens Mobility Limited, and as SPT has decided to continue to use this provider till the end of life for the OTN, the procurement route available is to negotiate without competition.

This negotiation process comprised of extensive discussions with Siemens Mobility Limited, including process mapping and resulted in a fully costed proposal with an increased level of maintenance that took into account the age of the equipment and aligned with the introduction of new rolling stock. The supplier proposals were fully scrutinised by the SPT Engineering team.

The final negotiated term of the contract is four years with effect from September 2018 for all OTN support including preventative and call out support. The contract duration will ensure the resilience of this system until introduction of the new system. This represents a reduction in risk over this period for a critical system, at a critical time for the Glasgow Subway. The contract negotiated with Siemens Mobility Limited has resulted in a fully comprehensive scope of maintenance support for SPT's OTN for a total price of £49,598 per annum, subject to annual CPI indexation.

4. Conclusion

The existing Subway OTN support contract is nearing its current end and a new contract requires to be put in place with the existing supplier to continue the reliable and safe operation of this part of the Subway system.

A negotiated approach has been taken with the current supplier and concluded with a proposed cost of £49,598 per annum, subject to annual CPI indexation.

5. Partnership action

The Partnership is recommended to approve the award of the OTN contract to Siemens Mobility Limited for a value of £49,598 per annum, subject to annual CPI indexation.

6. Consequences

Policy consequences	<i>None within this report.</i>
Legal consequences	<i>Regulated procurement required a PCS award notice, post approval.</i>
Financial consequences	<i>The contract costs will be contained within Subway revenue budget.</i>
Personnel consequences	<i>None</i>
Equalities consequences	<i>None</i>
Risk consequences	<i>There is a significant risk of disruption to Subway operations if a support contract for the OTN system is not put in place. A contingency amount has also been included within the overall budget to cover any unforeseen elements e.g. emergency repairs.</i>

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