

# GREATER LONDON AUTHORITY

## REQUEST FOR MAYORAL DECISION – MD2079

### Title: City Hall Network Upgrade

#### Executive Summary:

Information technology (IT) within City Hall supports and enables many of the services the GLA provides to Londoners and the data network within City Hall is critical to the functioning of these IT systems. The data network at City Hall was implemented in 2002 when the building was first constructed and now needs to be upgraded in order to remain functional and to support new ways of working within City Hall. This Mayoral Decision seeks approval from the Mayor for the procurement and implementation by the GLA Technology Group of an upgraded data network over 2 years.

#### Decision:

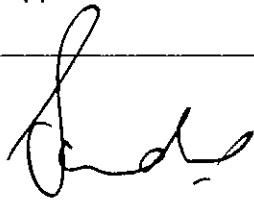
That the Mayor approves expenditure of up to £800,000 (including £200,000 from the GLA contingency budget) over two years (2017/18 to 2018/19), to procure services, supplies and works required for the upgrade of the wired and wireless local area network within City Hall.

#### Mayor of London

I confirm that I do not have any disclosable pecuniary interests in the proposed decision, and take the decision in compliance with the Code of Conduct for elected Members of the Authority.

The above request has my approval.

Signature:



Date:

15/3/17

## **PART I - NON-CONFIDENTIAL FACTS AND ADVICE TO THE MAYOR**

### **Decision required – supporting report**

#### **1. Introduction and background**

- 1.1. The data network at City Hall was implemented in 2002 when the building became the home of the Mayor, Assembly and the GLA, and is now in need of being upgraded in order to support the objectives of the organisation and the new ways of working within City Hall made possible through advances in technology and changes in working practices.
- 1.2. The GLA's "IT Strategy 2016" commits to providing a secure IT infrastructure and to support new ways of working by moving all IT services into the "Cloud", which means moved out to the internet. Within City Hall there is a requirement to implement an upgraded network solution that will meet the capacity, resiliency and security needs of the organisation.
- 1.3. Much of the network infrastructure at City Hall is reaching the end of its life and needs to be upgraded. The move to more cloud based computing allows changes in the network architecture which can improve resilience and speed. One of these changes will be moving important network components away from the lower ground floor (where they are potentially at risk from flooding) to other more secure locations within City Hall. This work aligns with work completed under approvals secured under cover of MD1350 and DD1375, which allowed for key computing and data storage equipment to be moved offsite away from this same lower ground floor room.
- 1.4. Along with the upgrade of the components of the wired network this project will also upgrade the wireless network so that the speed and performance for users matches that of working on a GLA desktop computer. A new secure wireless network for staff will be created, enabling staff direct access to the City Hall data network from laptops without the need to go through the secure remote access system. This will make it easier to work flexibly in City Hall using laptops or other mobile devices.
- 1.5. This project supports many other IT projects and enables other IT infrastructure components to function properly however upgrading the network infrastructure within City Hall is an independent project with clearly defined outcomes as outlined below.
- 1.6. The services are being procured by TfL procurement using the Crown Commercial Services framework RM3733.

#### **2. Objectives and expected outcomes**

- 2.1. Within scope of this project is the design, implementation and support of the wired and wireless network at the GLA and satellite offices. The required outcomes from this project are:
- 2.2. A network infrastructure that will allow for future increases in both wired and wireless network traffic. In particular to allow for future changes in network usage, particularly with regard to moving away from wired PCs to wireless devices such as MacBooks, laptops, iPads smart phones etc. This will include the ability to cope with large numbers of Apple devices connecting simultaneously using Apple's wireless protocol. The network design will be able to cope with at least 1000 simultaneous wireless device connections.

- 2.3. The solution will include a new inter floor fibre cabling to increase capacity from 1Gbit to at least 10Gbit.
- 2.4. A network infrastructure that will improve the resiliency of our network, particularly with regard to access from end user devices to the internet and cloud based services, but also improving network resiliency for services hosted on the GLA's private cloud (which consists of services running at City Hall and at a datacentre connected to City Hall via a MAN (Metropolitan Area Network) link).
- 2.5. A solution that will provide a network infrastructure that supports our strategic IT service delivery model of moving all services into the cloud, particularly with regard to network resiliency and traffic prioritisation. With regard to resiliency the solution will be able to take advantage of the GLA's two separate connections out to the internet, one which goes via the TfL MAN and the other provided by a leased line with up to 24Gbit internet connection speed.
- 2.6. A solution that will provide a network infrastructure that will enable and take advantage of intelligent network functionality such as device tracking and security threat management, for example being able to track and prevent suspicious network behaviour, block particular devices or device types or patterns of behaviour or being able to track particular devices on our network.
- 2.7. A solution that will provide a network infrastructure that supports current and expected future security standards for wired and wireless network infrastructure.
- 2.8. A solution that will provide a network design which allows for the provision of a securely separated internal wifi network and a guest wifi network.
- 2.9. A solution that will provide value for money and maximal security by reusing the GLA's existing infrastructure where appropriate.
- 2.10. A solution that will provide equipment and a network design which allows for GLA staff and/or the supporting company the flexibility to reconfigure network services to allow for unpredictable future requirements, for example by being able to prioritise certain network traffic or network traffic from devices or segments, or particular network protocols etc.
- 2.11. A solution that will provide equipment and a network design which allows for GLA staff and/or the supporting company to monitor and control network usage, such as being able to track how the network is being used by people and devices.

### **3. Equality comments**

- 3.1. The public sector equality duty requires the identification and evaluation of the likely potential impacts, both positive and negative, of the decision on those with protected characteristics (age, disability, gender reassignment, pregnancy and maternity, race, gender, religion or belief, sexual orientation).
- 3.2. The Authority's equality duty has been taken into account when planning this project.
- 3.3. The upgraded network will allow for improved network access throughout the building including improved wireless access to support new ways of working which themselves support the GLA's accessibility objectives and responsibilities.

#### 4. Other considerations

##### Key risks and issues

The Technology Group have been monitoring risks and issues and the below risks have been identified.

Risk Description	Mitigation Actions
There is a risk that the solution does not meet end user requirements.	<ol style="list-style-type: none"><li>1. End user requirements were gathered as part of the Technology Group's customer engagement programme and the resulting detailed are reflected in the requirements specification document created for this project and used for the resulting procurement process.</li></ol>
Service disruption prior to implementation. In particular the GLA's core switches are end of life and are therefore no longer supported by the manufacturer, which thereby presents a possible risk of core system failure.	<ol style="list-style-type: none"><li>1. Our incumbent supplier has been contracted to hold legacy equipment (in particular a stock of spare compatible core switches and associated equipment) in order to mitigate this risk.</li><li>2. Replacement of core switches (which is the equipment which presents the highest risk of service disruption) will be replaced early in the implementation process.</li></ol>
Service disruption during implementation.	<ol style="list-style-type: none"><li>1. The procurement framework used ensures that all potential suppliers are suitably qualified.</li><li>2. The prospective suppliers are asked to demonstrate how they propose to address this risk during implementation by, for example, ensuring rollback positions are maintained during the implementation and any work that might result in outages are completed out-of-hours.</li><li>3. All suppliers are required to comply with the GLA's change control procedure, which includes carrying out a risk assessment for all changes and agreeing all changing prior to implementation.</li></ol>
Service disruption post implementation.	<ol style="list-style-type: none"><li>1. An option to extend the support for up to 5 years (including the implementation period) is included.</li></ol>
Risk of not obtaining value for money	<ol style="list-style-type: none"><li>1. Pre-market engagement and market research resulting in a detailed specification</li><li>2. The aim of this procurement is to encourage a level of competition which will generate savings via a competitive process providing the best value and reduced cost against the requirements. The overall benefit of this procurement will be the</li></ol>

	<p>improvements made to the overall performance and capability of the GLA network.</p> <ol style="list-style-type: none"> <li>3. The procurement specification document has been drafted in terms of outcomes which thereby enables suppliers to provide an innovative and cost effective solution which makes use of the latest capabilities in networking technologies and standards.</li> <li>4. The procurement will be conducted under Public Contracts Regulations 2015. Lot 3 of framework agreement RM3733 has 20 suppliers, who will provide the GLA with a wide selection of expertise and are fully qualified to deliver the requirement. Having specialist suppliers is expected to encourage competitive offerings and offer best value for money.</li> </ol>
Risk of wireless network interruption or failure.	<ol style="list-style-type: none"> <li>1. The wireless network will be implemented in addition to the existing desktop to edge switch structured cabling.</li> <li>2. The core of the network (from the wireless access points to the network core and then through to the internet) will consist of an updated and resilient wired network infrastructure.</li> <li>3. The wireless net itself will be implemented with overlapping wireless access point coverage for resiliency purposes.</li> </ol>

## 5. Financial comments

Approval is being sought for expenditure of up to £800,000 (including £200,000 from the GLA's contingency budget) across two financial years (breakdown shown below). This will be funded from the TG Budget in each respective financial year.

Financial Year	Budget required
2017/18	£400,000
2018/19	£200,000
2018/19 contingency	£200,000
Total	£800,000

## 6. Legal comments

6.1 The foregoing sections of this report indicate that:

6.1.1 the decisions requested of the Mayor concern the exercise of the GLA's general powers to do such things as may be considered to be facilitative of or conducive or incidental to the discharge of its principal purposes; and

6.1.2 in formulating the proposals in respect of which a decision is sought officers have complied with the GLA's related statutory duties to:

- (a) pay due regard to the principle that there should be equality of opportunity for all people;
- (b) consider how the proposals will promote the improvement of health of persons, health inequalities between persons and to contribute towards the achievement of sustainable development in the United Kingdom; and
- (c) consult with appropriate bodies.

6.2 In taking the decisions requested, the Mayor must have due regard to the Public Sector Equality Duty; namely the need to eliminate discrimination, harassment, victimisation and any other conduct prohibited by the Equality Act 2010, and to advance equality of opportunity between persons who share a relevant protected characteristic (race, disability, gender, age, sexual orientation, religion or belief, pregnancy and maternity and gender reassignment) and persons who do not share it and foster good relations between persons who share a relevant protected characteristic and persons who do not share it (section 149 of the Equality Act 2010). To this end, the Mayor should have particular regard to section 3 (above) of this report.

6.3 Officers must ensure that the procurement activity is conducted in accordance with the procedures and processes of the Crown Commercial Services framework proposed for use and the applicable "call-off" contract documentation is put in place and executed by the successful bidder(s) and the GLA before the commencement of the services, supplies and/or works.

## 7. Planned delivery approach and next steps

Activity	Timeline
Procurement of contract	March 2017
Announcement	March 2017
Delivery Start Date	April 2017
Delivery End Date	March 2019
Project Closure	March 2019

### Appendices and supporting papers:

#### Appendix 01 GLA IT Strategy 2016

**Public access to information**

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FOI Act) and will be made available on the GLA website within one working day of approval.

If immediate publication risks compromising the implementation of the decision (for example, to complete a procurement process), it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary. **Note:** This form (Part 1) will either be published within one working day after approval or on the defer date.

**Part 1 Deferral:**

**Is the publication of Part 1 of this approval to be deferred? YES**

If YES, for what reason:

Disclosing the exact funds available could impact the competitiveness of the responses to the tender operation.

Until what date: 30 August 2017

**Part 2 Confidentiality:** Only the facts or advice considered to be exempt from disclosure under the FOI Act should be in the separate Part 2 form, together with the legal rationale for non-publication.

**Is there a part 2 form – NO**

**ORIGINATING OFFICER DECLARATION:**

Drafting officer to confirm the following (✓)

**Drafting officer:**

Tom Jackson has drafted this report in accordance with GLA procedures and confirms the following:

✓

**Sponsoring Director:**

Martin Clarke has reviewed the request and is satisfied it is correct and consistent with the Mayor's plans and priorities.

✓

**Mayoral Adviser:**

David Bellamy has been consulted about the proposal and agrees the recommendations.

✓

**Advice:**

The Finance and Legal teams have commented on this proposal.

✓

**Corporate Investment Board**

This decision was agreed by the Corporate Investment Board on 13 March 2017.

**EXECUTIVE DIRECTOR, RESOURCES:**

I confirm that financial and legal implications have been appropriately considered in the preparation of this report.

Signature

*m D. Clarke*

Date

13.3.17

**CHIEF OF STAFF:**

I am satisfied that this is an appropriate request to be submitted to the Mayor

Signature

*D. Bellamy*

Date

13 / 3 / 2017.

