GREATER**LONDON**AUTHORITY

REQUEST FOR DIRECTOR DECISION – DD1152

Title: Server upgrade in the GLA IT disaster recovery centre

Executive Summary:

This decision seeks approval to purchase new servers to be installed in the TfL data centre that is used by the GLA as a disaster recovery site. The installation of the new servers will increase the reliability and performance of the disaster recovery site. Importantly, it will also enable the GLA to start using the TfL data centre to provide live services (rather than simply being a backup site). This will improve the speed and reliability of GLA services since the TfL data centre is superior to the server room in City Hall. It will also reduce the need for planned downtime (for maintenance) of servers in City Hall since services can be easily moved back and forth between City Hall and the TfL data centre.

The current servers in the TfL data centre will be re-used for other purposes.

Decision:

That the Director approves the expenditure of up to £70,000 from the Technology Group capital budget for the purchase of new GLA servers for the TfL data centre.

AUTHORISING DIRECTOR

I have reviewed the request and am satisfied it is correct and consistent with the Mayor's plans and priorities.

It has my approval.

Name: Martin Clarke Position: Executive Director (Resources)

Signature: Date: 14 March 2014

PART I - NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1. Introduction and background

DD1152 Server Upgrade in the GLA IT Disaster Recovery Centre (this DD) should be read in conjunction with DD1155 Additional IT Data Replication Appliance. Both DDs relate to upgrades to GLA disaster recovery facilities.

The two requirements (server upgrade and additional replication appliance) are two separate pieces of work which could be approved or rejected individually. In addition, these two pieces of work will involve two separate procurements and contracts with two separate suppliers since the two pieces of work are technically quite distinct from one another. There is not one supplier who would be able to meet both requirements. For these reasons, the two requirements are presented as separate DDs even though they both relate to upgrades to the GLA disaster recovery facilities.

For clarity, MD1120 Additional IT Storage was approved in January 2013 and provided for the purchase of additional disc storage some of which was used in the GLA disaster recovery centre. The primary reason for the requirement for additional storage at that time was because the LDA and part of the HCA had moved to City Hall resulting in greatly increased IT storage requirements.

The GLA has in place IT disaster recovery arrangements that involve copying data from City Hall to a TfL data centre in the south of England in (close to) real-time. City Hall is linked to the TfL data centre across the TfL city-wide, high-speed data network. This arrangement has been in place since before the London Olympics in 2012 and is working well.

The facilities at the TfL data centre are far superior to the facilities of the computer room in City Hall and increasingly the GLA is finding additional business benefits in using the TfL data centre that go beyond simply using it as a disaster recovery site. As an example, at times of high usage the primary location of the GLA website (www.london.gov.uk) is moved to the TfL data centre since this provides superior performance and reliability. Currently, only a temporary read-only copy of the website is deployed to the TfL data centre, meaning that changes cannot be made to the website during periods of high usage.

The GLA wishes to start using the TfL data centre as a private Cloud computing solution. This means that staff in City Hall would normally be connected to, and work from, the GLA servers located in the TfL data centre. The servers in City Hall would then become the backup servers (reversing the current situation). The GLA can achieve all of the benefits of Cloud technology (provided by the TfL data centre) whilst maintaining strong control and security over our data and systems. This is particularly relevant in the light of recent news reports about agencies accessing private data that is held in the public Cloud. As an example, the GLA wishes ultimately to move email and Blackberry services to the TfL data centre thereby greatly improving system performance and resilience.

An additional benefit of such an arrangement is that services can then quickly and easily be moved back and forth between City Hall and the TfL data centre, reducing the need for planned system downtime. Planned downtime may be required for a number of reasons such as server maintenance or upgrades, and also maintenance work to City Hall facilities, including the electrical power supply. It is becoming increasingly difficult to schedule planned downtime. This is partly because the news and media as a whole is operating round the clock and also reacting very quickly to news events. It is also because the GLA has taken on more of a role of direct service provision which is more likely to require reactive, out of hours work. Finally, the GLA is providing IT as a shared service for MOPAC and MOPAC is particularly sensitive to fast breaking events.

The current GLA servers located in the TfL data centre are specified as backup servers. This means that they would provide adequate performance in an emergency situation but they are not fully specified to be used permanently and full-time as the primary GLA servers.

Approval is sought to purchase 3 servers to be located in the TfL data centre that have a specification sufficient to operate as the primary, live servers, in accordance with GLA technical standards. The servers will be procured through the established TfL IT framework agreement.

For completeness, it is anticipated that some additional faster storage will also be required in the TfL data centre before GLA email and Blackberry services can be located there. This is not planned to take place in the current financial year. It will be the subject of a separate approval after the new servers have been commissioned.

The current servers that are located in the TfL data centre will not be wasted. These will be redeployed to run the GLA website in the TfL data centre. The web server is separate from the servers that hold internal GLA data for security reasons. The current servers have a higher capacity than the current web servers so this change will improve the capacity and performance of the website.

The current web servers located in the TfL data centre will also not be wasted. These will be redeployed to City Hall and used to upgrade the current web servers in City Hall (which will, in the future, be the secondary backup site). The current web servers in the TfL data centre have more memory than the web servers in City Hall so this changes represents an upgrade in capacity.

Commissioning the new servers will be carried out by GLA engineers. Hence there will be minimal requirement for professional services to support this work.

There is budget available in the agreed Technology Group capital budget that can be allocated to purchase these new servers.

2. Objectives and expected outcomes

Three new GLA servers purchased and commissioned in the TfL data centre.

The existing GLA servers in the TfL data centre re-used for other purposes.

3. Other considerations

Approval is sought to upgrade the disaster recovery servers located in the GLA disaster recovery site, and to re-deploy the current servers to other uses. The proposal relates to systems that are well-established and no corporate risks are expected to arise from this work.

The GLA Corporate Business Plan for 2013/14 includes 3 key priorities for the Technology Group, one of which is to:

Implement measures to strengthen the security and resilience of IT services at City Hall.

This approval supports this corporate priority.

4. Financial comments

4.1 Purchase of this hardware is capital expenditure and will be met from the existing 2013/14 Technology Group capital budget. Ongoing maintenance or support of the servers are revenue costs

and are estimated to be £800 p.a. These costs can be contained within the existing TG revenue budget.

5. Legal comments

- 5.1 Sections 1 to 4 of this report indicate that:
 - 5.1.1 the decision requested of the Director (in accordance with the GLA's Contracts and Funding Code) falls within the GLA's statutory powers to do such things considered to further or which are facilitative of, conducive or incidental to the discharge of its general functions; and
 - 5.1.2 in formulating the proposals in respect of which a decision is sought officers have complied with the GLA's related statutory duties to:
 - pay due regard to the principle that there should be equality of opportunity for all people;
 - 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
 - consult with appropriate bodies.
- 5.2 The supplies required must be procured by Transport for London Procurement who will determine the detail of the procurement strategy to be adopted in accordance with the GLA's Contract and Funding Code.

Officers must ensure that appropriate contract documentation is put in place and executed by the successful bidder and the GLA before the commencement of the supplies.

6. Planned delivery approach and next steps

This approval is for the purchase of server hardware. The hardware will be commissioned by GLA engineers.

Appendices and supporting papers:

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 <u>or</u> 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:

The GLA will be at a commercial disadvantage if prospective bidder has knowledge of the GLA budget estimates.

Until what date: until the procurement is complete (estimate 15 March 2014)

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:	
<u>Graham Lane</u> has drafted this report in accordance with GLA procedures and confirms that:	✓
Assistant Director/Head of Service:	
<u>David Munn</u> has reviewed the documentation and is satisfied for it to be referred to the Sponsoring Director for approval.	✓
Financial and Legal advice:	
The <u>Finance and Legal</u> teams have commented on this proposal, and this decision reflects their comments.	✓

EXECUTIVE DIRECTOR, RESOURCES:

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

Signature Date