GREATERLONDONAUTHORITY

REQUEST FOR MAYORAL DECISION – MD1350

Title: Transition of IT Services to TfL Datacentre

Executive Summary:

A key priority for the Technology Group (TG) - as articulated in the GLA Business Plan 2014/15 to 2015/16 - is to "Implement measures to strengthen business continuity of services at City Hall " (p86)¹. The GLA plans to achieve this by implementing a multi-phase programme to build a private cloud infrastructure in partnership with TfL using two offsite datacentres as outlined in the Information Technology Programme 2014/15 and the TG Business Continuity Strategy (Appendix 01).

Phase 1 of this programme is a discrete collection of related works totalling £230,000 capital expenditure from a number of suppliers and following a number of discrete procurement exercises. This total includes the previously approved 'DD1152 Server Upgrade' and 'DD1155 Additional IT Data Replication Appliance'. Approval is now sought for an additional purchase of network switch and network storage equipment not exceeding £75,000 from the existing 2014/15 Technology Group capital budget and £3,300 revenue expenditure to be contained within the existing TG revenue budget. As the total expenditure proposed exceeds £150k (taking account of the previous DD), a Mayoral Decision is being requested.

Phase 1 of this programme is a discrete programme of work which will allow key live services to be moved offsite and thereby provide definable business benefits as outlined in this report. Future phases are referred to in this report but will be subject to separate approvals.

Decision:

That the Mayor approves expenditure of up to \pm 75,000 from the Technology Group capital budget for the purchase of high speed network and storage equipment for use at the TfL datacentre.

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.

Vr Signature: Date: 11.7.2014

MD Template April 2014

¹ http://www.london.gov.uk/sites/default/files/Final%20BP%202014-16%20-%20May%202014.pdf

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

Decision required – supporting report

1. Introduction and background

1.1 The GLA currently runs its live IT services from a computer room in City Hall and hires a single rack from TfL's offsite datacentre facility for data backup and IT disaster recovery purposes as approved in 'MD734 Provision of IT hosting space at TfL's Data Centre'. This offsite datacentre facility is far superior to the facilities of the computer room in City Hall due to its physical location, physical security, and its resilient power supply and network connectivity. There are therefore advantages to using this datacentre to run live IT services. TfL are also implementing a second datacentre and the GLA have outline plans to hire an additional server rack during 2016/17 and thereby build a resilient private cloud capability in partnership with TfL. In order to achieve this objective the GLA propose a three phase approach as outlined in Appendix 01 (Technology Programme 2014/15 and the TG Business Continuity Strategy).

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- 1.2 Phase 1 of this programme is a discrete collection of work which involves procuring and implementing the hardware infrastructure within TfL's datacentre required to run live servers (as opposed to using it for back purposes only). This will allow key services to be moved to the offsite facility and therefore reduce the business risk associated with running these services due to the superior nature of the offsite facility and the business risk of running these services at City Hall. Phase 1 will provide business benefits regardless of whether the future phases of service transition outlined in Appendix 01 are implemented. Phase 1 will lay the foundation for the future phases of service transition outlined in Appendix 01 and will be subject to separate approval processes.
- 1.3 During the refresh of equipment at the above TfL's offsite datacentre the Technology Group has been building a foundation for moving live services offsite. This document should therefore be read in conjunction with 'DD1152 Server Upgrade' and 'DD1155 Additional IT Data Replication Appliance'. Both of these Director Decision documents (DDs) relate to the refresh of equipment at the offsite facility and thereby help lay the foundations for phase 1 of the transition of services outlined in this document and Appendix 01. These DDs in combination with this report total £230,000 capital expenditure and in combination deliver phase 1 of this programme.
- 1.4 Building a private cloud would mean that staff in City Hall would normally be connected to, and work from, the GLA servers located in the TfL datacentre. 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 datacentre) 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.
- 1.5 An additional benefit of such an arrangement is that services can more easily be moved back and forth between City Hall and the TfL datacentre, reducing the need for system downtime. System 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 due partly to the news and media as a whole operating round the clock and the GLA having to react very quickly to news events. It is also because the GLA has taken on more of a role of direct service provider 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 external events.
- 1.6 The additional equipment that is required to enable the building of this private cloud facility is a pair of high speed and resilient network switches and around 40TB of high speed resilient network storage. The current GLA disk storage and network switches located in the TfL datacentre are specified as backup devices. This means that they would provide adequate performance in an

emergency situation but they do not have the performance capacity to be used permanently and full-time to run the GLA's primary systems. In addition the network switch infrastructure at Woking is end of life and due for replacement. The backup disk capacity will continue to be used for backup purposes.

- 1.7 Approval is sought to purchase of 2 x 1u network switches that support a mix of fibre and Ethernet and to include at least 16 x 10gb fibre and 8 x 1gb copper connections and around of 40TB (terabytes) of high speed SAS disk storage to be located in the TfL datacentre and that have a specification sufficient to operate as the primary live systems in accordance with GLA technical standards.
- 1.8 These devices will be procured in accordance with the GLA's Contracts and Funding Code.
- 1.9 Commissioning the new systems will primarily be carried out by GLA engineers. Hence there will be minimal requirement for professional services to support this work.
- 1.10 There is budget available in the agreed 2014/15 Technology Group capital budget that can be allocated to purchase these new systems.

2. Objectives and expected outcomes

 The procurement and implementation of the network switch and network storage equipment are detailed in this report.

3. Equality comments

 An equality impact assessment has been carried out. The proposals outlined in this report will result in IT infrastructure services being moved from one location to another location for the purposes of increasing resilience and saving money. Day-to-day maintenance of the systems will be carried out remotely via PCs within City Hall (as is the current arrangement) and therefore no impact on any individuals with any protected characteristics has been identified.

4. Other considerations

4.1 This report addresses the GLA Business Plan 2014/15 to 2015/16 priority "Implement measures to strengthen business continuity of services at City Hall". This priority is addressed by working in partnership with TfL and thereby delivering cost savings.

5. Financial comments

5.1 Purchase of this hardware costing £75,000 is capital expenditure and will be met from the existing 2014/15 Technology Group capital budget. Ongoing maintenance and support, at an estimated cost of £3,300 per annum, of these systems will be covered by the Technology Group's existing network and technical infrastructure support arrangements. All related costs will therefore continue to be contained within the existing TG revenue budget.

6. Legal comments

Power to Undertake the Requested Decision

6.1 Under section 30 of the Greater London Authority Act 1999 (the 'Act') the mayor, acting on behalf of the GLA, is entitled to do anything that he considers will further the promotion, within Greater London, of economic development and wealth creation, social development and the improvement of the environment.

6.2 Furthermore, section 34 of the Act allows the GLA, acting by the mayor, to do anything which is calculated to facilitate, or is conducive or incidental to, the exercise of any functions of the GLA exercisable by the mayor. In the instant case, the procurement of high speed network and storage equipment for the GLA's IT system may be viewed as being calculated to facilitate and conducive and incidental to all of GLA's various functions.

Procurement of the Equipment

6.3 The officers are reminded of the requirements of the GLA's Contracts and Funding Code (updated as of the 1 June 2014). To this end, the officers should liaise with TfL's procurement team regarding the procurement of the equipment.

7. Investment & Performance Board

This IT investment does not fall under the IPB terms of reference.

8. Planned delivery approach and next steps

Please see Appendix 01 Information Technology Programme 2014/15.

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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? NO If YES, for what reason:

Until what date: (a date is required if deferring)

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 – YES

| ORIGINATING OFFICER DECLARATION: Drafting officer: | Drafting officer to confirm the following (✓) |
|--|---|
| <u>Tom Jackson</u> has drafted this report in accordance with GLA procedures and confirms the following have been consulted on the final decision. | \checkmark |
| 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. | ✓ |
| Sponsoring Director: <u>Martin Clarke</u> has reviewed the request and is satisfied it is correct and consistent with the Mayor's plans and priorities. | \checkmark |
| Mayoral Adviser: <u>Sir Eddie Lister</u> has been consulted about the proposal and agrees the recommendations. Advice: | ✓ |
| The Finance and Legal teams have commented on this proposal. | \checkmark |

EXECUTIVE DIRECTOR, RESOURCES:

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

Signature

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| Date | 4 | - |
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CHIEF OF STAFF:

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

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Signature

| Date | 08 | :0 | 7: | 20 | 14 |
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