GREATER LONDON AUTHORITY

REQUEST FOR MAYORAL DECISION - MD2578

Title: Private cloud upgrade

Executive Summary:

The GLA Technology Group (TG) seeks approval for up to £450,000 of capital expenditure over two financial years and up to £12,000 per annum revenue for upgrades to the GLA's private cloud technical infrastructure. In 2010 the GLA entered into a shared services arrangement with Transport for London (TfL) for the provision of datacentre capacity. In the years following this agreement, a substantial technology presence was established in this datacentre. Some of this technology is now reaching the end of vendor support and needs to be upgraded or replaced in order to ensure the security of GLA data and continuity of service. This decision relates to the upgrade of key data storage, data backup and data processing equipment hosted in the datacentre.

Decision:

The Mayor is asked to approve:

- 1) Capital expenditure of up to £250,000 from the Technology Group 2019-20 capital budget for the purchase and implementation of storage, server and data backup equipment for use at City Hall and TfL's datacentre; and
- 2) Capital expenditure of up to £200,000 from the Technology Group 2020-21 capital budget for the purchase and implementation of storage, server and data backup equipment for use at City Hall and TfL's datacentre,

noting that associated revenue expenditure of up to £12,000 per annum will be incurred for the support and maintenance of storage, server and data backup equipment for use at City Hall and TfL's 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.

adal

Signature:

Date:

19/2/20

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

Decision required – supporting report

1. Introduction and background

- 1.1. In 2010 the GLA entered into a shared services arrangement with Transport for London (TfL) whereby the GLA rents part of one of TfL's datacentres. Further, City Hall was built with on-site machine room capacity, which is still operational. Major upgrades to the equipment used within these facilities were added in 2014 (MD1350¹, DD1167², DD1155³, DD1375⁴). This additional infrastructure is used for hosting business systems, providing data storage, providing data backup and data security. This capacity is collectively referred to as the GLA's "private cloud". In addition to this private cloud capacity the GLA has made increasing use of public cloud capacity and hosted solutions from commercial providers.
- 1.2. In 2018-19 the GLA commissioned an external company to assess the GLA's options for moving all remaining IT services from GLA's private cloud to Azure public cloud. Whilst the GLA's technology and digital services have been steadily migrated to the public cloud, due to increasing demand for IT services there continues to be a need for this private cloud capacity. Much of the storage, processing and backup equipment that makes up the GLA's private cloud is becoming end of life and needs replacing or upgrading.
- 1.3. In 2019 the GLA was subject to a security assessment which highlighted security risks associated with running out-of-date systems. Our current environment is older than the currently supported version of virtualisation software (VMware) and does not support the latest operating system versions. Continuing to run the current environment therefore presents an operational as well as security risk as there is both a risk of hardware or software failure, a risk of data compromise and removal of support from suppliers. The solution proposed in this document supports both updated software and provides protection against, amongst other risks, ransomware attacks. The ransomware protection comes from the updated backup solution which provides additional data separation and automatic detection of suspicious behaviour.
- 1.4. The GLA's private cloud environment currently has around 300 virtual servers stretched across the two sites (City Hall and TfL datacentres). Services running from these servers include the following: shared network drive data, telecommunication services, print services, authentication and end user account management services (including Active Directory), GLA business including correspondence management services, internally used geographical information systems, network management, logging and monitoring services, archived data, the intranet and Connect, certificate services and public cloud management services, and MOPAC services including their business systems, network drive data and SharePoint. It is expected that services that are currently running from our private cloud will be rationalised and continue to be moved to public cloud providers over the next three years. Prior to services being moved into the public cloud it is important to the GLA from both a business continuity and security perspective that the underlying hardware and software is up-to-date and supported.
- 1.5. An updated private cloud solution will help support the strategic objectives of the organisation including the flexible working agenda as approved in DD2375 GLA Transformation Programme Ways of Working by ensuring key systems currently run within the GLA's private cloud continue to be available via mobile devices and data remains secure.
- 1.6. This procurement is for the purchase of a replacement consolidated server, storage and backup equipment. The procurement is being managed by TfL Procurement with input from TG. A request for

¹ https://www.london.gov.uk/decisions/md1350-transition-it-services_tfl-datacentre

² https://www.london.gov.uk/mayor-assembly/gla/governing-organisation/executive-team/directors-decisions/DD1167

³ https://www.london.gov.uk/mayor-assembly/gla/governing-organisation/executive-team/directors-decisions/DDJ155

⁴ https://www.london.gov.uk/decisions/dd1375-data-storage-expansion

proposal specification was created by TG and released by TfL Procurement to a shortlist of potential suppliers using the G-Cloud 11 Crown Commercial Services framework. The expected outcomes of this procurement are outlined below.

2. Objectives and expected outcomes

- 2.1. A private cloud data storage, data backup and data processing capacity to meet one of the strategic objectives of the Technology and Digital Strategy to have Robust, secure and scalable technology infrastructure.
- 2.2. A value for money solution achieved by completing a mini competition within the G-Cloud 11 Crown Commercial Services framework.
- 2.3. The decommissioning of ageing systems with corresponding revenue savings and with the completion of hardware decommissioning expected by June 2020 as outlined in section 7.1 below.

3. Equality comments

- 3.1. Under section 149 of the Equality Act 2010, as public authorities, the Mayor and GLA are subject to a public-sector equality duty and must have 'due regard' to the need to (i) eliminate unlawful discrimination, harassment and victimisation; (ii) advance equality of opportunity between people who share a relevant protected characteristic and those who do not; and (iii) foster good relations between people who share a relevant protected characteristic and those who do not. Protected characteristics under section 149 of the Equality Act are age, disability, gender re-assignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation, and marriage or civil partnership status (all except the last being "relevant" protected characteristics).
- 3.2. An equality impact assessment has been carried out. Regarding the upgrade to data storage, data backup and data processing capacity, the day-to-day maintenance of the systems will still 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. Regarding the end user service provided from the GLA's private cloud, these services are accessible flexibly from the Surface Pro devices being implemented by the transformation programme and thereby support the outcomes articulated in DD2375: GLA Transformation Programme Ways of Working. The objectives articulated in this document are therefore in support of the equality comments outlined in DD2375.

4. Other considerations

- 4.1. In support of DD2375 this work supports the Mayor in delivering his vision of a 'fair and equal city'. The work streams will support the GLA's aim to be an exemplar employer with good working practices. The working environment and arrangements will inspire and enable everyone at the GLA to work effectively together, make the best use of available space, enjoy a healthy work-life balance, and deliver world-class services to London and Londoners.
- 4.2. Data protection and General Data Protection Regulations (GDPR) guidelines will be complied with by all providers.

5. Financial comments

5.1. Approval is sought to approve expenditure of up to £450,000 of capital expenditure for the upgrade of Private Cloud & remote access and revenue expenditure of £36,000 for support and maintenance.

5.2. The capital expenditure will be profiled over the following financial years; £250,000 in 2019-20 and £200,000 in 2020-21 and will be funded from the Technology Group capital budget. The support costs of £12,000 per annum will be funded by the Technology Group revenue budget in the following financial years: 2020-21, 2021-22 and 2022-23.

6. Legal comments

- 6.1. Sections 1 to 5 of this report indicate that the decisions requested of the Mayor (in accordance with the GLA's Contracts and Funding Code) concern the exercise of the GLA's general powers, falling within the GLA's statutory powers to do such things considered to further or which are facilitative of, conducive or incidental to the promotion of economic development and wealth creation, social development or the promotion of the improvement of the environment in Greater London; and in formulating the proposals in respect of which a decision is sought officers have complied with the Authority'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.
- 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 and foster good relations 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 (section 149 of the Equality Act 2010). To this end, the Mayor should have particular regard to section 4 (above) of this report.
- 6.3. Officers should ensure that the works 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 Contracts and Funding Code. Officers must ensure that appropriate contract documentation is put in place and executed by the successful bidder(s) and the GLA before the commencement of the works.

7. Planned delivery approach and next steps

Activity	Timeline
Procurement of contract	February 2020
Announcement	February 2020
Delivery Start Date	April 2020
Delivery End Date	June 2020
Project Closure	June 2020

Appendices and supporting papers:

None

Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FoIA) 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 it has been approved <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: Deferred until project completion due to the security risks highlighted in this document. Expected by 30 June 2020

Part 2 - Sensitive information

Only the facts or advice that would be exempt from disclosure under FoIA should be included 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:	
Mary Harpley has reviewed the request and is satisfied it is correct and consistent with the Mayor's plans and priorities.	V
Mayoral Adviser:	,
David Bellamy has been consulted about the proposal and agrees the recommendations.	V
Advice:	,
The Finance and Legal teams have commented on this proposal.	Y
Corporate Investment Board	
This decision was agreed by the Corporate Investment Board on 17 February 2020	

EXECUTIVE DIRECTOR, RESOURCES:

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

Signature

M Dalle

Date 17.2,20

CHIEF OF STAFF:

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

Signature

D. Bellamy

Date 19 /2 /2020.