GREATER**LONDON**AUTHORITY

REQUEST FOR DIRECTOR DECISION – DD2111

Title: ESRI (UK) GIS Software Maintenance

Executive Summary:

Approval is sought for the procurement of Geographic Information System (GIS) software maintenance services and desktop software licences from ESRI (UK) Ltd (ESRI (UK)) up to a maximum expenditure of £105,000 over a period of three years.

The GIS software provided by ESRI (UK) is used extensively by officers throughout the GLA for map creation and analysis tasks. It also provides an infrastructure for mapping functionality on the GLA website. Entering into an ELA will provide continued access for the GLA to a sufficient number of licences, ensure that the GIS software is kept up to date (including security patches) and ensures access to new products as they are released over the next 3 years.

ESRI (UK) have exclusive rights to provide the above described services within the UK and no other supplier is able to provide maintenance and support services in respect of ESRI (UK) GIS software in the UK.

Decision:

That the Executive Director of Communities and Intelligence approves expenditure of up to a maximum of £105,000 for a three year Enterprise Licence Agreement with ESRI (UK) Ltd for the period 1st May 2017 to 30th April 2020 for GIS software maintenance services and sufficient desktop licences for all GLA GIS users.

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: Jeff Jacobs

Position: Executive Director of Communities and Intelligence

Signature:

Date: 3/5/17

PART I - NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1.   Introduction and background

1.1   Procurement of original software
In September 2007 a programme of work, known as the 'GIS programme', was authorised (MA3204) to improve the GIS infrastructure in place at the GLA, including the procurement of GIS server software. The specification was developed by GLA officers with the objective of using commercial off-the-shelf (COTS) software to meet current and future requirements for mapping functionality.

The procurement was carried out under Office of Government Commerce Buying Solutions Catalyst framework (S-CAT 15d) for 'GIS Provision of Software & Value Added Services' and a shortlist of five suppliers were invited to tender for the work. ESRI (UK) were identified as having submitted the most economically advantageous bid and awarded a contract with a value of approximately £125,000.

In January 2007 the transfer of the London Analyst Support Site (LASS) service from the Government Office for London to the GLA was approved with effect from 1st April 2007 (MA2867). Included in this transfer were a number of desktop and server licences for ESRI (UK) software and a great deal of work has been done to integrate the LASS systems into the GLA IT infrastructure including the consolidation of desktop GIS licences into a shared pool.

This DD follows on directly from DD1237 which finishes on 30th April 2017.

1.2   Geographic Information Systems (GIS) are specialist software applications that allow officers at the GLA to exploit the spatial component of the large quantities of data used within the organisation. The software products supplied by ESRI (UK) Ltd (ESRI (UK)) - recognised as a market leader - are used extensively by both the public and private sector throughout London, UK and the world.

1.3   The ESRI (UK) GIS software used by officers at the GLA falls into two distinct categories – desktop and server. Desktop products are typically installed on local PCs and are used for map production and analysis, whilst server products provide an infrastructure for developing mapping functionality on GLA websites.

1.4   Entry by the GLA into an Enterprise Licence Agreement with ESRI would provide the following benefits to the GLA over and above purchasing each product individually:

- An increase in the number of simultaneous users of desktop mapping for the duration of the ELA
- Access to the more advanced versions of the software, including extensions for spatial and 3D analysis for the duration of the ELA
- Brings the GLA's GIS desktop and server licencing up to date and will keep it up to date for 3 years
- Provides the licencing to support a move to a cluster of cloud servers for the GLA's public web mapping.

The table below provides a list of ESRI (UK) products in current use at the GLA.

Product	Purpose
Desktop	
ArcGIS Desktop	Creation, management and analysis of geographic data and large format

	map production
ArcGIS Extensions	Specialist modules for 3D visualisation, geostatistics and network analysis, Data review and publishing of read-only packages
Productivity Suite	Tools for conversion of Ordnance Survey data into useable formats
City Engine	Detailed 3D model creation and visualisation
LocatorHub	Address matching and gazetteer creation
Server	
ArcGIS Server	Enterprise tools for publishing and managing geographic services, managing spatial databases and developing mapping applications via the Internet
ArcGIS Online	Tools for secure sharing of maps across the organisation or with partners

Examples of the essential uses to which ESRI software products are put and the value that they provide to the GLA are set below.

- *London.gov.uk* Website – the GLA website contains a number of mapping applications such as the Schools Atlas (featured in London & national media), London Rents Map, Heat Map and Street Trees Map. These sites are all built using server GIS components to communicate information to London citizens in a visual manner.
- *London Energy Plan* – desktop GIS used as part of modelling process to identify zero carbon options, server product used to create an interactive web map.
- *Rough Sleepers Map* – desktop GIS used to process and visualise the data from a variety of sources. Secure interactive map for use by partners including Boroughs, Home Office and Metropolitan Police.
- *Infrastructure Plan 2050* – desktop GIS used to combine data from utilities and other partners. Server supports Infrastructure Mapping Application (IMA) as funded by Lane Rental Fund. Allows data to be shared as services with TfL and the Boroughs.
- *Crime Mapping* – the SafeStats systems developed by the Intelligence Unit are built using server GIS components to display crime incident data and to run cutting edge hotspot analysis.
- *London Datastore* – desktop GIS products are used in the preparation of datasets on the Datastore website that have a geographic component.
- *Opportunity Area Planning Frameworks* (OAPF) – officers in the Planning team use desktop GIS software extensively to prepare maps and graphics for the various OAPF documents.
- *Events* – the Intelligence Unit make extensive use of GIS software to assist colleagues in high profile projects and events such as the Mayor's Fund for London, New Year's Eve fireworks and Big Dance by creating maps for the general public to use and to inform officer meetings.
- *Wall Maps* – Intelligence Unit have produced numerous wall maps for Mayoral Advisors, Assembly Members and the Chief Executive, all produced using the cartographic tools within desktop GIS.
- *City Hall Floor Map* – desktop GIS was used to prepare the imagery and artwork for the Air Quality floor map in the lower ground floor of City Hall.

1.5   Software use and maintenance

All of the licences for ESRI (UK) GIS software previously procured by the GLA cover perpetual use, entitling officers to continue to use the existing version of the software for as long as required. This DD and the associated ELA allow the GLA to access updates for such ESRI (UK) GIS software as is already owned by the GLA and to access additional licences for the ELA period only.

1.6   Selection of ESRI (UK) as Provider

Given the value of the proposed contract, GLA officers acknowledge that section 4.1 of the GLA's Contracts and Funding Code (Code) requires the GLA to seek a call-off from a suitable framework where possible or, if not, undertake a formal tender process to procure such services in relation to all contracts for goods or services with a value above £10,000.

ESRI (UK) is a supplier on the GIS Framework which is managed by TfL and is open to the GLA and its Group to call-off under. Lot 1 of the GIS Framework allows the GLA to call off services relating to: Enterprise licence applications which this decision form relates to and other services such as professional services and support relating to enterprise licence applications. The GLA consider the GIS Framework to be a suitable framework which enables the GLA to directly award to suppliers under it. As such, the GLA believes the appropriate route to market is a direct award of the ELA to ESRI (UK) under Lot 1 of the GIS Framework.

Additionally, continuing to contract with ESRI (UK) will provide compatibility with the existing service in light of the knowledge and experience of meeting the GLA's needs that they have amassed.

2.   Objectives and expected outcomes

Supply of desktop and webserver software for the creation of maps, spatial analysis and the publishing of web map services.

The software is available for immediate download from the ESRI website and in many cases is already installed on GLA hardware, meaning that it will be available from commencement of the ELA.
Entry into the ELA ensures that the GLA has sufficient licences to match the physical installations of ESRI (UK) GIS software.

3.   Equality comments

The GLA is subject to public sector equality duties. Overall, no adverse impacts have been identified as a result of entering into a contract for services with ESRI (UK) for use and maintenance of the above described GIS software and related licences.

The analysis and interactive maps created with the software will support the Mayor's programmes to reduce inequality in London including Rough Sleepers map, London Rent map & High Streets for All.

4.   Other considerations

4.1   Links to strategies and Mayoral and corporate priorities
- The ESRI (UK) GIS software infrastructure forms part of a fundamental technology platform for a number of high profile projects including the SCAN Safestats systems, London Rents Map, Drain London Geo-Portal and the London Development Database.
- The redevelopment of the GLA website places an even greater emphasis on interactive maps to help the public understand the work of the GLA.
- The management and use of geographic data using ESRI (UK) GIS software forms a fundamental part of the work programme for the GIS team in the Intelligence Unit. The team provides a mapping and GIS service to a wide range of strategic projects within the organisation.

4.2 Impact assessments and Consultation
- GLA officers have consulted with colleagues in the relevant departments, including Planning, Environment, Regeneration and Technology Group to identify the potential impact of not continuing ESRI (UK) GIS software maintenance arrangements. These impacts include:
  o GLA officers not being able to carry out work due to lack of technical knowledge.
  o Potential failure or shutdown of public facing mapping websites due to software incompatibilities or lack of access to bug fixes and security updates.
  o Additional expenditure on future software upgrades in order to meet potential demands placed on the GIS infrastructure.

4.3 Risk
- There is a risk that having paid for the software maintenance the services are not actually called upon. However based on past experience the technical support services have been used on a regular basis and in the case of the London Rents Map project proved critical in identifying and fixing a significant software bug prior to launch.
- The GIS infrastructure in place at the GLA is relied upon for a number of high profile projects and will form the basis for any future projects or developments that require mapping functionality. It is possible (though highly unlikely) that some existing or new projects are deemed surplus to requirements and that the GIS infrastructure would therefore no longer be required.
- Any software upgrades will need to be implemented by appropriately trained staff and there is a risk that insufficient staff resources will be available to do so. The appropriate service management procedures will be put in place to ensure that any required upgrades can be implemented in a timely manner.

5.   Financial comments

5.1   Approval is being sought for expenditure of up to £105,000 for the period 1 May 2017 to 30 April 2021 for GIS software Maintenance services.

5.2   The costs will be funded from the Intelligence Unit and Technology Group budgets over four financial years as shown below:

Financial Year	Intelligence Unit	Technology Group Unit	TOTAL
2017-18	£19,108	£12,975	£32,083
2018-19	£20,845	£14,155	£35,000
2019-20	£20,845	£14,155	£35,000
2020-21	£1,737	£1,180	£2,917

5.3   The ELA provides a substantial saving to the GLA over the list capital and maintenance costs. The GLA is obtaining value for money through joint negotiations with TfL and through the low cost of maintaining the software in comparison to the high value GLA gains from the various purposes it puts the software to (see section 1.4).

6. Legal comments

6.1. Section 30 of the Greater London Authority Act 1999 (as amended) (GLA Act) gives the Mayor a general power to do anything which he considers will further one or more of the principal purposes of the GLA as set out in section 30(2) which are:

   6.1.1. promoting economic development and wealth creation in Greater London;
   6.1.2. promoting social development in Greater London; and
   6.1.3. promoting the improvement of the environment in Greater London.

6.2. Sections 1-3 of this report indicate that:

   6.2.1. the proposals in respect of which the Director's approval is sought may be considered to fall within the GLA's powers to do such things as are facilitative of or conducive to the its general powers in Greater London as set out at section 6.1 above;

   6.2.2. 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 health of persons, health inequalities between persons and to contribute towards achievement of sustainable development in the United Kingdom; and
      (c) consult with the appropriate bodies.

6.3. Section 4.1 of the Code requires the GLA to seek a call-off from a suitable framework where possible or, if not, to undertake a formal tender process to procure such services in relation to all contracts for goods or services with a value above £10,000.

6.4 Section 1.6 of this report indicate that the GLA intends to directly award the ELA to ESRI (UK) under a pre-existing, suitable framework under which the GLA has the right to directly award contracts. A single source exemption under the Code is therefore not required in this instance.

7. Planned delivery approach and next steps

Activity	Timeline
Procurement of contract [for externally delivered projects]	30/4/2017
Announcement [if applicable]	-
Delivery Start Date [for project proposals]	1/5/2017
Final evaluation start and finish (self/external) [delete as applicable]:	-
Delivery End Date [for project proposals]	30/4/2020
Project Closure: [for project proposals]	-

Appendices and supporting papers:

DD1237

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 – NO

ORIGINATING OFFICER DECLARATION:	Drafting officer to confirm the following (✓)
Drafting officer: Paul Hodgson has drafted this report in accordance with GLA procedures and confirms that:	✓
Assistant Director/Head of Service: Andrew Collinge has reviewed the documentation and is satisfied for it to be referred to the Sponsoring Director for approval.	✓
Financial and Legal advice: The Finance and Legal teams have commented on this proposal, and this decision reflects their comments.	✓
Corporate Investment Board: The Corporate Investment Board reviewed this proposal on 2 May 2017.	

EXECUTIVE DIRECTOR, RESOURCES:

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

Signature *M. D. elle*   **Date** *2. 5. 17*