GREATER**LONDON**AUTHORITY

REQUEST FOR DIRECTOR DECISION – DD1237

Title: **ESRI GIS Software Maintenance**

Executive Summary:
Licensed use of a Geographic Information System (GIS) is required to enable the GLA to exploit the spatial component of the large quantities of data used within the organisation to enable the undertaking of efficient activity in the discharge of its functions. GLA use of such systems enables mapping applications on the GLA website, crime mapping and analysis functions, the preparation of London Datastore datasets, the preparation of OAPF related maps and graphics and event footprint analysis.

The GLA holds a perpetual license for ESRI GIS products. Maintenance of such products is excusive to ESRI (UK) in the UK. Accordingly the GLA has option but to purchase the maintenance of what are essential tools from ESRI (UK).

Approval is sought for the procurement of Geographic Information System (GIS) software maintenance licences from ESRI (UK) up to a maximum expenditure of £85,000 over a period of three years. Through this Director's Decision and the corresponding Enterprise Licence Agreement (ELA) several previous arrangements are brought into a single place and additional expenditure of £63,435 is sought.

Decision:
That the Executive Director approves:

1. Expenditure of up to £63,435 (in addition to the £21,000 covered by DAR 'ESRI Desktop and Server Licences' in 2013/14 and DD896 for 2014/15) for a three year Enterprise Licence Agreement (ELA) with ESRI (UK) for the period 1st May 2014 to 30th April 2017 for GIS software maintenance services and sufficient desktop licences for all GLA GIS users.

2. A related exemption from the requirement (under section 4.1 of the GLA's Contracts and Funding Code) to undertake tender activity for the required services/call off the required services from a suitable framework.

AUTHORISING DIRECTOR/HEAD OF UNIT

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   Head of Paid Service and Executive Director

Signature

Date   24 July 2014

PART I - NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1. Introduction and background

1.1 Use of ESRI GIS software within the organisation

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) are recognised as one of the market leaders and are used extensively by both the public and private sector throughout London, UK and the world.

The 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 websites.

The Enterprise Licence Agreement with ESRI provides the following benefits to the GLA:

- An increase in the number of simultaneous users of desktop mapping
- Access to the more advanced versions of the software, including extensions for spatial and 3D analysis
- 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 cloud servers for the GLA's public web mapping.

The total cost of the ELA over three years is £84,930. However, licences bought in 2013/14 (DAR 'ESRI Desktop and Server Licences') can be taken against this total, making the actual total cost to the GLA £75,140.

Expenditure is already budgeted for 2014/15 covered by DD896 'ESRI GIS Software Maintenance'. This means that this Director's Decision is required for £63,435. The table below sets out these costs and their breakdown over the three year period.

Expenditure (all DD's and ADD's)	
Total cost (3 years)	£84,930
less 2013/14 DAR	-£9,790
Total cost 2014-17	£75,140
less previous IU DD (2014/15)	-£11,705
Total new DD	**£63,435**
Break down of new DD by year	
2014/15	£6,815
2015/16	£28,310
2016/17	£28,310

The table below provides a list of 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
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 essential use to which ESRI software products are put and the value that they provide to the organisation 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), Mayor's 2020 vision interactive map, London Rents Map, DrainLondon and Street Trees Map. These sites are all built using server GIS components to communicate information to London citizens in a visual manner.
- *Crime Mapping* – the SafeStats systems developed by the SCAN team 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* – officers in the Planning team use desktop GIS software extensively to prepare maps and graphics for the various OAPF documents.
- *London 2012 and Events* – the Intelligence Unit made extensive use of GIS software to assist colleagues in the run up to London 2012 and subsequently with other high profile projects and events such as the Mayor's Fund for London, Skyride and the Notting Hill Carnival.
- *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 London floor map in the lower ground floor of City Hall.

1.2 Procurement of original software

The current pool of GIS software licences has been accrued over a relatively long period from a number of different sources including ad-hoc purchases, a strategic work programme and the transfer of staff and assets from other organisations.

A small number of desktop software licences have been purchased over the last five years by a number of individual departments as a result of identifying a business need for the software. The procurement of these has been in accordance with GLA procurement guidelines and due to the relatively small sums involved they have typically been authorised at unit level.

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 Catalist 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) Ltd 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 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.

1.3   Software maintenance

All of the licences for ESRI GIS software procured by the GLA cover perpetual use, entitling officers to continue to use the existing version of the software for as long as required.

In April 2010 MD601 approved the continuation of maintenance agreements for the GLA's suite of ESRI software for a further year, with an optional extension for a further year. This contract was awarded to ESRI (UK) under an approved exemption from the Contracts and Funding Code from the requirement to conduct a competitive procurement exercise, on the basis that at the time no other supplier could provide the services in question and that continued contracting with ESRI (UK) provided compatibility with an existing service.

1.4   Selection of ESRI (UK) as Provider

Although officers acknowledge that section 3.8 of the GLA's Contracts and Funding Code ("Code") requires that supplies/services with a value between £5000 and £125,000 be competitively procured/called off from an accessible framework section 5 of the Code also provides for the approval of exemptions from this requirement on certain grounds.

ESRI (UK) have exclusive rights to provide these services within the UK and although other parts of the global ESRI reseller network have rights to sell similar services within their respective countries there is no cross-territory selling of software licences or maintenance.

Simply put, no other supplier is able to provide maintenance and support services in respect of ESRI software in the UK.

In order to confirm that the market had not changed since 2010, a competitive procurement exercise was undertaken in May/June 2012 to select a suitable supplier to provide software maintenance for the ESRI suite of GIS products. A mini competition was held with all six suppliers on Lot 1 of the TfL GIS Applications and Services Framework (ref ITC10976).

ESRI (UK) Limited was the only one of the six suppliers to respond to the Request for Proposal and the results of the evaluation of their bid are shown in the table below.

Criteria	Weight	Score – ESRI (UK) Limited
Technical requirement • Compatibility with legacy systems • Functionality • Service levels/Support • Licence Model	50%	8
Price	50%	8
Total	100%	16

Scoring system

0	=	Not acceptable
3	=	Poor
5	=	Acceptable but with significant reservations
7	=	Good: acceptable but with minor reservations
8	=	Very good: no reservations
10	=	Excellent: Exceeds requirements

As a result of the mini competition, ESRI (UK) were selected as supplier for a 3 year period up to June 2015.

The market has not changed since this mini competition and this has been proven as TFL recently (in April 2014) undertook a mini competition under the GIS Framework for a TFL ELA and ESRI were the only supplier to respond to the tender. Therefore GLA ELA will be a direct award with ESRI. The ESRI ELA Terms and Conditions agreed for the TFL ELA will apply to the GLA ELA.

1.5   Requirement for the software maintenance

There are three main issues with the current arrangements that this DD will address:

- the GLA has made a corporate decision to use ESRI products for map production. Currently there is a mixed user base, with some staff using MapInfo. This limits the ability to share data produced by different teams. It doubles the work of updating standard files (such as Ward boundaries). However, there are insufficient total ESRI desktop licences to migrate staff away from MapInfo for the creation of maps (16 ESRI, compared to 60 identified users). There are currently bottlenecks where insufficient ESRI licences prevent users creating or updating maps on a particular day;
- of the 16 ESRI desktop licences only 3 are 'in licence' that is the GLA is able to access updates. The GLA is using ArcGIS 10.0 (released 4 years ago) which is a particular issue for the interactive web maps, where functions are being requested by staff in other Directorates that require the current software (ArcGIS 10.2).
- The GLA is looking to migrate some of its public-facing web maps to cloud-based servers and requires additional licences to run these in parallel.

By entering into an Enterprise Licence Agreement, for less than the cost of 16 desktop licences, the GLA will be able to access between 16 and 3,000 licences simultaneously for the most recent versions of the software. All users will have the same version of the software ensuring compatibility across Directorates.

2.   Objectives and expected outcomes

The total cost of the ELA over three years is £84,930. However, licences bought in 2013/14 (DAR 'ESRI Desktop and Server Licences') can be taken against this total, making the actual total cost to the GLA £75,140.

Expenditure is already budgeted for 2014/15 covered by DD896 'ESRI GIS Software Maintenance'. This means that this Director's Decision is required for £63,435. The table below sets out these costs and their breakdown over the three year period.

Expenditure (all DD's and ADD's)		
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Total new DD	**£**	**63,435**
Break down of new DD by year		
2014/15	£	6,815
2015/16	£	28,310
2016/17	£	28,310

The costs will be fully met by a combination of Intelligence Unit and Technology Group budgets over the coming three years as shown below:

Breakdown of new DD by Cost Centre		
IU Cost Centre	**TG Cost Centre**	**TOTAL**
GG.0220.003.002 – Software Maintenance	tbc	
	£ 6,815	£ 6,815
£ 14,155	£ 14,155	£ 28,310
£ 14,155	£ 14,155	£ 28,310
£ 28,310	**£ 35,125**	**£ 63,435**

The ELA provides a substantial saving to the GLA over the list capital and maintenance costs, which are shown in the table below. Across the different products, the licences are being supplied for 33% of the list price.

Product	Quantity	Captial List Price	Maintenance list price	Yr 1Captial Purchase	Maintenance Yr2	Maintenance Yr3	Total list value	ELA
ArcGIS Desktop Basic	20 (3 concurrent per user)	£3,350	£595	£67,000	£11,900	£11,900	£90,800	
ArcGIS Desktop Standard	3	£7,200	£1,353	£21,600	£4,059	£4,059	£29,718	
ArcGIS Desktop Advanced	0	£14,425	£3,400	£ -	£ -	£ -	£ -	
ArcGIS Desktop Network Analyst	3	£3,350	£ 680	£10,050	£ 2,040	£2,040	£14,130	
ArcGIS Desktop Spatial Analyst	3	£3,350	£680	£10,050	£2,040	£2,040	£14,130	
ESRI UK ProductivitySuite Government	1	£1,150	£1,150	£1,150	£1,150	£1,150	£3,450	
Sub-total Desktop							**£152,228**	Cost to IU: £49,805
ArcGIS for Server Standard	2	£26,750	£6,675	£53,500	£13,350	£13,350	£80,200	
ArcGIS for Server Image Extension	1	£ 11,845	£2,950	£11,845	£2,950	£2,950	£17,745	
ArcGIS Online (Annual Subscription)	1	£1,950	£1,950	£,950	£1,950	£1,950	£5,850	
Sub-total Server							**£103,795**	Cost to TG: £35,125
			Total	**£177,145**	**£39,439**	**£39,439**	**£256,023**	**£84,930**

3.   Equality comments

The Authority, and TfL are subject to public sector equality duties, and the contract that will be awarded, will be consistent with these duties, and with the Mayor's strategies and plans. Overall, no adverse impacts are identified; and it is expected that positive contributions to equality will arise through improved accessibility available in more recent versions of the software.

4.   Issues for consideration

4.1   This ADD seeks approval of an exemption from the requirement of section 4.1 of the GLA's Contracts and Funding Code to enable the appointment of ESRI UK to carry out the proposed services without competition. One of the grounds for exemption in section 5 from section 4.1 of the GLA's Contracts and Funding Code to undertake a competitive procurement exercise is where no other supplier is able to undertake the services. Officers have confirmed that this is the case.

4.2   Links to strategies and Mayoral and corporate priorities
- The ESRI GIS infrastructure forms 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 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.

4.3   Impact assessments and Consultation
- GLA officers have consulted with colleagues in the relevant departments to identify the potential impact of not continuing software maintenance arrangements. These are summarised as:
  - 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.
- No further consultation has been carried out.

4.4   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 has 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 to enter into a three year Enterprise Licence Agreement (ELA) with ESRI (UK) for the period 1 May 2014 to 30 April 2017 for GIS software Maintenance services (seeking an exemption to the contracts & funding code for this purpose).

5.2   The maximum cost of the proposed contract totals £84,930 for which licences bought in 2013-14 costing £9,790 and approved via the Delegated Authority Record can be offset against this total. The licence costs will be phased over four financial years as follows:

- 2013-14 - £9,790 – already approved and paid
- 2014-15 - £18,520
- 2015-16 - £28,310
- 2016-17 - £28,310

5.3   With regards to the funding source for 2013-14, the contract costs of £9,790 were funded directly from the Intelligence Unit's budget for 2013-14. From the 2014-15 financial year onwards, the funding source for the contract will be divided between the Technology Group's and the Intelligence Unit's software maintenance budgets as per the table below.

Funding Source for contract				
Year	Intelligence Unit	Technology Group	TOTAL	
2013/14	£9,790	-	£9,790	already approved and paid
2014/15	£11,705	£6,815	£18,520	£11,705 already approved
2015/16	£14,155	£14,155	£28,310	
2016/17	£14,155	£14,155	£28,310	
Total cost	£49,805	£35,125	£84,930	

5.4   The budgets for future years will be subject to the Authority's annual budget setting process, with any changes to this proposal, including budgetary implications being subject to the Authority's decision-making process. All appropriate budget adjustments will be made.

5.5   The Intelligence Unit in liaison with the Technology Group will be responsible for managing the proposed contract and ensuring all contract costs and monitoring adheres to the Authority's Financial Regulations, Contracts & Funding Code and Expenses & Benefits Framework.

6.   Legal Comments

6.1   The foregoing sections of this report indicate that:

6.1.1   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 discharge of its principal purposes;

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 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.

6.2   Section 4.1 of the GLA's Contracts and Funding Code ("Code") requires that contracts with values of this level be awarded following the competitive tender activity or be called off from suitable. However, section 5.4 of the Code also provides that an exemption from this requirement may be approved where the provider in question has an exclusive right to provide the services required. Officers have indicated that this is the case. Therefore, the Director may approve the proposed award and exemption if satisfied with the content of this report.

6.3   Officers must ensure that appropriate contract documentation is put in place and executed by the GLA and ESRI (UK) before the commencement of the services.

Public access to information

Information in this form is subject to the Freedom of Information Act 2000 (FOI Act) and other legislation. Information on this decision will be included in the Mayor's report and decision list. The form will be available publically from then. Any facts and advice that should not be made automatically available on request should not be included in Part 1 but instead on the separate Part 2 form. Deferment is only applicable where release before that date would compromise the implementation of the decision being approved.

Is the publication of this approval to be deferred? NO

If yes, for what reason:

Until what date:
Is there a part 2 form – NO

ORIGINATING OFFICER DECLARATION:

	Tick indicates approval (✓)
Drafting officer: Paul Hodgson has drafted this report in accordance with GLA procedures and confirms the following have been consulted on the final decision:	✓
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.	✓
Advice: The Finance and Legal teams have commented on this proposal.	✓

Executive Director, Resources

I have been consulted about the proposal and confirm that financial and legal advice have been taken into account in the preparation of this report.

Signature   **Date**