

Report of: Principal Strategic Sourcing Officer

Report to: Chief Officer (ICT)

Date: 28th March 2014

Subject: Continuation of Software Maintenance and Support for ESRI Geographic Information System (GIS)

Are specific electoral Wards affected?	🗌 Yes	🖂 No
If relevant, name(s) of Ward(s):		
Are there implications for equality and diversity and cohesion and integration?	Yes	🛛 No
Is the decision eligible for Call-In?	🗌 Yes	🛛 No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number:	🗌 Yes	🛛 No

Summary of main issues

- 1. In 1996 ArcGIS licences and business applications for the creation and maintenance of Local Land Charges, Planning and Estates data were purchased from ESRI UK Ltd.
- 2. ArcGIS underpins the provision of GIS and web mapping services and is key to the operation of the Uni-form suite of business applications and associated web applications supplied by IDOX of which there are around 1500 users split across City Development, Environment and Housing, Corporate Resources, Licensing and Legal Services.
- 3. Maintenance and Support are procured under an annually renewed contract.
- 4. The current contract with ESRI UK Ltd expires on 31st March 2014. The support renewal cost is £63757.50.
- 5. A strategic review of GIS technology will be undertaken by ICT over the next 12 months.

Recommendations

- 6. The Chief Officer (ICT) is recommended to waive Contracts Procedure Rules No 8.1 and 8.2 Intermediate value procurements and to award a 12 month contract to ESRI UK Ltd for the continuing support and maintenance of ArcGIS in the sum of £63757.50. The contract shall commence on the 1st April 2014 and expire on the 31st March 2015.
- 7. That the costs of the ArcGIS maintenance and support contract will continue to be met by ICT and recharged to Directorates accordingly.

1 Purpose of this report

1.1 To gain approval to waive Contracts Procedure Rules No 8.1 and 8.2 – Intermediate Value Procurements in order to procure a continuation of software support and maintenance for the existing ESRI ArcGIS software for a further 12 months so that its continued use as a key technology that underpins many council operations as well as data provision for the council's website can be secured pending a review of the Council's GIS technology strategy. As all directorates benefit from the data created, maintained and published by this solution, all directorates should contribute to the overall cost, being recharged appropriately by ICT Services.

2 Background information

- 2.1 ArcGIS licences and business applications from ESRI UK Ltd for the creation and maintenance of Local Land Charges, Planning and Estates data have been in use since 1996.
- 2.2 A Request for Information was carried out in 2011 from which ESRI again emerged as the most suitable GIS solution for the Council.
- 2.3 ArcGIS underpins the provision of GIS and web mapping services and is key to the operation of the Uni-form suite of business applications and associated web applications supplied by IDOX of which there are around 1500 users split across City Development, Environment and Housing, Corporate Resources, Licensing and Legal Services.
- 2.4 All ESRI ArcGIS related software and applications are supported internally by a team of two ICT staff supporting 300 named desktop users who share 84 concurrent licences at release version 10.0. We further have around 1000 users who have access to the free Map Explorer applications which was originally designed for Windows 95 and has a limited lease of life.
- 2.5 ArcGIS Licences come in three levels of functionality, ArcGIS Basic licence, ArcGIS Standard licence and ArcGIS licence (see Appendix for costs). These licences are subject to a maintenance only contract with ESRI UK Ltd. A separate support and maintenance contract was entered with ESRI UK Ltd for their externally hosted LocalViewFusion service in 2012 to power mapping for the new Leeds.gov.uk site.
- 2.6 Internal and some external web mapping sites are still based on the old ArcIMS 9.3.1 web mapping software which resides in a number of Windows Servers. We host web maps and data for the Tracks in Time page – collaboration with the West Yorkshire Archive Service funded by a lottery grant in 2009. This site is highly in demand and a valued resource on an international level by ancestry researchers and members of the general public. Lesser sites include our internal MapLeeds page that is particularly popular with staff in Legal and Enforcement as well as staff supporting Councillors.
- 2.7 The central data hub for all the above systems is a large oracle 11g database with over 1000 layers of information. This not only supports ArcGIS and Uni-form, but also holds data for other third party systems such as the Data Warehouse, council websites, Pest Control E-forms, the new Children's and Adults systems, School

transport, Business Intelligence, Traffic Accident analysis, Transport planning, Insight for Highways, BMX Bridge Management System, Waste Routes manager, Electoral Services, Siebel sandbags database, mobile library routes, soon the new Asidua Customer Service Portal, and potentially the new Parks and Countryside system.

- 2.8 The data is made widely available to external contractors and members of the public tasked with producing studies and reports on behalf of the council such as parish and village plans, flood management risk assessment, other impact statements and environmental assessments, as well as to underpin community projects such as the Chapeltown carnival or other projects like the Olympic Torch relay and the Tour de France.
- 2.9 Data is also held in a number of flat file formats on a shared drive to support the above activities and for use by Autocad, plus other smaller third party GIS such as MapInfo and GGP
- 2.10 Following a reduction in staffing levels, ArcGIS licences under maintenance were reduced by 45% in 2012. It was further planned to replace more expensive desktop based mapping software with web based mapping for the majority of GIS users. However, funding has not been available to pursue this option, leaving us with a two tier situation for future licence upgrades where some existing perpetual licences remain unsupported.
- 2.11 Alternatively, we would need to either bring some licence back under maintenance or purchase an Enterprise licence from ESRI UK Ltd to upgrade all our ArcGIS desktop licences beyond version 10.0. This will be considered as part of a strategic review (see 2.15)
- 2.12 After the initial fall in ArcGIS users to around 260 we are now back to our original number of some 300 desktop users as the business realise the power of this technology and the savings that it can help realise. It is important that we are able to upgrade the applications to future releases and draw on support from ESRI when needed. ArcGIS has an excellent availability track record with downtime more likely to be caused by hardware or network issues than the application itself.
- 2.13 There is a provision to bring existing licence back under maintenance if required at the a maximum cost of two years maintenance at the prevailing price regardless of how long the licences have been unsupported. This is a special offer from ESRI Inc and can be withdrawn by them at any time.
- 2.14 IDOX are working in partnership with ESRI UK Ltd to provide a completely new ArcGIS engine based spatial component for Uni-form 9.1 to have. There are plans for this to be able to utilise data provided via Web Mapping Services (WMS) from ArcGIS for Server in the near future. In the short to medium term, it therefore makes sense to retain our use of ArcGIS to support the Uni-form application.
- 2.15 A strategic review of GIS technology will be undertaken by ICT over the next 12 months.
- 2.16 The current contract with ESRI UK Ltd expires on 31st March 2014. The support renewal cost is £63757.50

3 Main issues

Reason for Contracts Procedure Rules Waiver

- 3.17 The council has made a considerable investment in ESRI products to support geographical data analysis across the business. All directorates have access to the applications and many of these corporate data sets are stored in the central oracle database. Much of the data is used to support the council website "Where I Live" feature.
- 3.18 Current licence holdings are split 50% unsupported at version 10.0 of ArcGIS and 50% supported version 10.1 with options for future upgrades if the maintenance contract is renewed.
- 3.19 Skills to use ArcGIS have been built up over the last two decades in-house to manage and support ESRI products, not only in ICT Services but across several directorates also.
- 3.20 The central data store is closely integrated with many other systems and web sites across the council.
- 3.21 The future direction of ArcGIS is to a more browser based environment with a requirement for more server based licences away from desktop licences. Until the future strategy for GIS technology in Leeds has been reviewed over the next 12 months it is critical to maintain the current services and retain support from ESRI for this business critical technology.

Consequences if the proposed action is not approved

3.22 Failure to agree the proposals above will put the business at risk. Due to the integrated nature of the data, several critical systems are at risk should any part of the ArcGIS technology fail or ArcGIS ceases to be compatible with upgrades/new versions of applications such as Internet Explorer or operating systems such as Windows. This would leave the council open to potential reputational damage (externally) and ICT Services (internally). Additionally, there could be an impact to the on-going implementation of new systems such as the Asidua Electronic Service Delivery system or the new Parks and Countryside system (currently at tender stage) since these both will require GIS functionality. Failure of the system may lead to departments developing or procuring their own bespoke solution(s) leading the disjointed service delivery of GIS functionality across the Council with its attendant support problems and increased cost.

Advertising

3.23 No advertising has been carried out pending a review of the Council's GIS technology strategy

4 Corporate Considerations

4.1 Consultation and Engagement

4.1.1 Consultation has taken place with ICT Services' Head of Strategy, Architecture & Commissioning and the Application & End User Services Manager with regard to the GIS technology strategy.

4.2 Equality and Diversity / Cohesion and Integration

4.2.1 There are no Equality and Diversity/Cohesion and Integration issues associated with this decision.

4.3 Council policies and City Priorities

4.3.1 GIS technology is an important element in the provision of services supporting delivery of the Council's Customer Access Strategy 2012-15 which has the goal of delivering high quality services that put customers at the heart of all that we do. Location based information services such as the "Where I Live" feature on the Council's website is an example of how this technology can be used for the benefit of the public. This allows a customer to add a valid Leeds postcode and discover what council services are available, from the immediate locality to a city-wide level. Such information includes, for example, location of household waste recycling sites, bin collection dates, ward councillors, One Stop Centres, community centres, libraries. This list is not exhaustive; available data is under constant review and can be changed based on customer demand and/or other factors.

4.4 Resources and value for money

4.4.1 It does not represent value for money to seek to procure a new GIS solution nor to substantially extend the current support contract until the Council's GIS technology strategy has been reviewed over the next 12 months. The contract is under regular review and ArcGIS licences under maintenance were reduced by 45% in 2012. One further licence has been taken out of maintenance for the next period.

4.5 Legal Implications, Access to Information and Call In

4.5.1 The decision is a Significant Operational Decision in that it involves a waiver of the Contract Procedure Rules. It is not subject to call-in.

4.6 Risk Management

4.6.1 Risks will be managed through the contract management process.

5 Conclusions

- 5.1 It remains cost effective to maintain and support the current ArcGIS applications for a further 12 months during which time a review of GIS technology strategy will be undertaken.
- 5.2 That a new support agreement with ESRI UK Ltd is approved for a further period of 12 months.

6 Recommendations

- 6.1 The Chief Officer (ICT) is recommended to waive Contracts Procedure Rules No 8.1 and 8.2 – Intermediate value procurements and to award a 12 month contract to ESRI UK Ltd for the continuing support and maintenance of ArcGIS in the sum of £63757.50. The contract shall commence on the 1st April 2014 and expire on the 31st March 2015.
- 6.2 The costs of the ArcGIS maintenance and support contract will continue to be met by ICT and recharged to Directorates.

7 Background documents¹

7.1 None

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.