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DECISION TITLE: Contract with Arcus Global Limited for the Migration of Servers from Town Hall to a remote computing and web service Amazon Web Services (AWS)

Councillor David Seaton: Cabinet Member for Resources

March 2015

Deadline date: March 2015

Cabinet portfolio holder:	Councillor David Seaton: Cabinet Member for Resources	
Responsible Director:	John Harrison: Corporate Director: Resources	
Is this a Key Decision?	YES	
	If yes has it been included on the Forward Plan : YES	
	Unique Key decision Reference from Forward Plan :	
	KEY/26DEC14/01	
Is this decision eligible for call-in?	YES	
Does this Public report have any annex that contains exempt information?	YES The attached Exempt Annexes are NOT FOR PUBLICATION in accordance with paragraph 3 of Schedule 12A of Part 1 of the Local Government Act 1972 in that they contains information relating to financial and business affairs namely, a section of the proposed contract and the selection of Arcus Global Limited, which include details of the evaluation and cost sums submitted. The public interest test has been applied to the information that is contained in the Exempt Annexes to this Decision Notice and it is considered that the need to retain the information as exempt outweighs the public interest in disclosing it because to disclose it could compromise the Council's position in any future procurement for these works.	
Is this a project and if so has it been registered on Verto?	Yes – PR002123	

RECOMMENDATIONS

The Cabinet Member is recommended to:

- 1. Authorise the award of a contract to Arcus Global Limited to migrate the Council's server estate (as detailed in Exempt Annex 1) and purchase the required server capacity within a remote computing and web service, Amazon Web Services (AWS) for a period of two years, for up to £1,260,000.
- 2. Authorise the Corporate Director: Resources to vary this Contract if, during the implementation stage, the Council has to amend its detailed business requirements. Any variation shall not increase the total Contract cost above £1,260,000.

1. SUMMARY OF MAIN ISSUES

- 1.1 This report seeks the Cabinet Member's approval of the recommendations to seek to ensure that the Council is provided with an effective Information and Communications Technology (ICT) server estate suite of software products to support the needs of the Council as it undertakes its transformation agenda and which are:
 - Stable;
 - Flexible;
 - Adaptable;
 - · Resilient; and
 - Appropriate to the needs to the Council in the medium to long term.

2. PURPOSE OF THIS REPORT

- 2.1 This report is for the Cabinet Member for Resources to consider exercising delegated authority under paragraph 3.4.8(a) of Part 3 of the constitution in accordance with the terms of their portfolio at paragraphs (j) & (p).
- 2.2 The attached Exempt Annexes are NOT FOR PUBLICATION in accordance with paragraph 3 of Schedule 12A of Part 1 of the Local Government Act 1972 in that they contain information relating to financial and business affairs namely, a section of the proposed contract and the selection of Arcus Global Limited, which include details of the evaluation and cost sums submitted.
- 2.4 The public interest test has been applied to the information that is contained within the Exempt Annexes to this Decision Notice and it is considered that the need to retain the information as exempt outweighs the public interest in disclosing it because to disclose it could compromise the Council's position in any future procurement for these works.

3. TIMESCALE

Is this a Major Policy	NO
Item/Statutory Plan?	

4. DETAILS OF DECISION REQUIRED

- 4.1 The decision maker is asked to:
 - 4.1.1 Authorise the award of a contract to Arcus Global Limited to migrate the Council's servers (as detailed in Exempt Annex 1) and purchase the required server capacity within a remote computing and web service for a period of two years, for up to £1,260,000; and
 - 4.1.2 Authorise the Corporate Director: Resources to vary this Contract if, during the implementation stage, the Council has to amend its detailed business requirements. Any variation shall not increase the total Contract cost above £1,260,000.
- 4.2 The Council's servers are currently located in the server room at the Town Hall. The move to a remote computing and web service is predicated on the current state of the server room at the Town Hall and the potential issues which may be caused by the continued use of the existing servers as explained further in paragraph 7 below. The move underpins the Council's Technology Strategy 2014 2019.
- 4.3 The remote computing and web service which is being provided by Arcus Global Limited (Amazon Web Services AWS) is recognised as the world leader in cloud infrastructure services and have a large portfolio of available products. Due to their size and global coverage they are able to offer server capacity at competitive rates whilst constantly improving and introducing new features mostly at no additional cost.
- 4.4 The contract with Arcus Global Limited will be directly called off from the Crown Commercial Service G-Cloud 5 framework (contract ID: RM1557v). The framework allows direct award provided that the call off process detailed within the framework is followed. This process consists of the following steps:
 - 4.4.1 Preparation: Evaluating procurement routes, establishing technical requirements, considering funding and timescales and market research;
 - 4.4.2 Search & Long List: Searching the potential providers on the framework to refine the range of services available to locate the services which suit requirements;
 - 4.4.3 Long List to Short List: Applying filters to reduce the list of potential providers on the framework;
 - 4.4.4 Evaluation and Selection: Determining weighting of evaluation criteria set by the framework and evaluating and scoring short listed providers to select the provider for direct award;
 - 4.4.5 Award/Buy: Notifying unsuccessful short listed providers and directly awarding to selected provider by call off contract;

- 4.4.6 Benefits: Completing and submitting G-Cloud Benefits Record form to the Crown Commercial Service confirming the call off contract.
- 4.6 The process required by the framework to select a successful provider has been complied with and the recommendation from this process is to award the Contract to Arcus Global Limited, as the most economically advantageous tender. Details of the evaluation and scoring of the short listed providers is contained within Exempt Annex 2.
- 4.7 Under the proposed Contract, the services to be provided by Arcus Global Limited include:
 - 4.7.1 the purchase of the AWS remote computing and web service environment for a period of 2 years;
 - 4.7.2 the migration of the Council's servers detailed in Exempt Annex 1 to AWS.

5. CONSULTATION

- 5.1 The project was included in the Council's 2014/2015 Budget and accordingly the required investment for this project was consulted on as part of the Council's overall budget consultation in January 2014.
- 5.2 The budget consultation was taken to full Council on 5th March 2014for all members to consider.

6. ANTICIPATED OUTCOMES

6.1 The Contract with Arcus Global Limited will purchase and implement the AWS remote computing and web service environment and migrate the Council's servers listed in Exempt Annex 1 from the Town Hall into this environment.

7. REASONS FOR RECOMMENDATIONS & ANY RELEVANT BACKGROUND INFORMATION

- 7.1 The migration of the Council's servers from the Town Hall to a remote computing and web service environment underpins the Council's Technology Strategy 2014 2019. Issues have been experienced due to the current location of the servers. In January 2014 the server room had a number of failures which resulted in staff being unable to work for approximately half a day in each instance.
- 7.2 The exceptionally hot weather over the summer months has also highlighted issues with the air conditioning units which service the server room, and their ability to maintain a suitable temperature for the servers to operate correctly. This poses a potential risk of disruption to the Council's ICT service which could result in staff being unable to access or use their ICT systems.
- 7.3 The use of the server room has been reviewed and it was concluded that the Council would need to spend approximately £400,000 on maintenance works on the server room in order to ensure it is suitable to continue to house the servers.
- 7.4 Although the server room is subject to a lease to Serco, the Council remain responsible for the cost of renewing and replacing Council fixtures and conduits which become incapable of repair or cease to operate correctly.

- 7.5 Whilst any maintenance of the server room was undertaken, the Council would need to move the current equipment out, host it at a third party site and then move the equipment back after the server room maintenance works were completed. This is likely to involve an additional cost of approximately £600,000 and would also result in some service disruption.
- 7.6 In addition, a large proportion (80%) of the servers in the Town Hall data centre are over five years old. The majority of these will need to be replaced in the next two years. The cost of replacing those servers would be substantial. Modernisation and/or replacement of the servers would be required on an ongoing basis (approximately every five years). The Council is a very large and complex organisation with an ICT infrastructure to match it. The Council currently has approximately 200 virtual servers hosted on 17 ESX hosts and 101 physical servers. The cost of replacing these would be approximately £350,000 for the hardware alone plus costs to migrate the software to the new servers. This would be in addition to the costs previously mentioned in 7.3 and 7.5.
- 7.7 It is anticipated that pressures on the ICT infrastructure will continue to grow and the use of a third party hosted service through the Contract with Arcus Global Limited would provide the Council with a high availability of the servers and would also provide the Council with a level of Disaster Recovery and Business Continuity which it currently does not have.
- 7.8 The Council's Technology Strategy 2014 2019 which was agreed by Cabinet in September 2014, confirms that there should be a move towards "Cloud" technology. The proposed Contract with Arcus Global Limited provides the Council with the flexibility required to implement the Technology Strategy and transformation programmes.
- 7.9 In addition to migrating the Council's servers detailed in the exempt annex, Arcus Global Limited will also provide server capacity within AWS for two years. The Council would therefore no longer need to incur the expense detailed in paragraphs 7.3 7.6 above in respect of the servers which are migrated and hosted within AWS.
- 7.10 The proposed Contract with Arcus Global Limited enables the Council to manage the estate in a far more efficient and cost effective manner and through strict governance and ensuring that we turn off servers within AWS when not required, the amount of servers required could potentially be reduced and the Council may therefore benefit from an immediate cost reduction.
- 7.11 The budget of £1,260,000 for this project is included within the Capital Programme.
- 7.12 In the future, the Council have a requirement to relocate the existing servers from the Town Hall. The migration of the servers to a remote computing and web service at this stage would avoid another substantial project to move all of the equipment from Town Hall upon a civic suite being selected, with an unknown disruption to services.
- 7.13 The proposed Contract with Arcus Global Limited seeks to ensure that the Council is provided with an effective ICT service which is:
 - Stable:
 - Flexible:
 - Adaptable;

- Resilient; and
- Appropriate to the needs of the Council in the medium to long term.

8. ALTERNATIVE OPTIONS CONSIDERED

The following alternative options were considered and rejected:

8.1 Remain with server room at Town Hall:

This option has been rejected due to the financial reasons mentioned in paragraph 7. The current server room is not fit for purpose and it would not be sensible for the Council to procure new hardware with a five year life cycle in view of the move towards "Cloud" technology, as indicated in the Council's Technology Strategy 2014 – 2019 and would not provide value for money in the long term for the council.

8.2 Move the server Estate to Fully Managed Data Centre:

This option has been rejected due to the financial implications of this option. Initial indications would suggest a large initial capital outlay followed by a large annual revenue cost which indicated that it would cost the council in the region of £3.5 million over a five year period.

8.3 Payment options:

There are many different payment models in relation to the purchase of the AWS environment via Arcus Global Limited, which include a "pay-as-you-use model", the purchase of server capacity up front (reserved instances) and a hybrid model. Having evaluated the options with the finance department the decision to move to the hybrid model is the best value for the Council. The Council will initially utilise the "pay-as-you-use" model whilst it migrates applications to AWS with Reserved Instances then being purchased for a two year period. The reserved instances are better value for money over the two year period, whereas the "pay-as-you-use" model gives the council the best value short term whilst applications are being migrated.

9. IMPLICATIONS

- 9.1 Financial:
 - 9.1.1 The Contract cost for the Council is up to £1.26m, which includes:
 - Arcus Global Limited project costs to migrate the servers
 - Purchase of the AWS environment for two years from Arcus Global Limited
 - 9.1.2 There will be an ongoing revenue charge for the ongoing purchase of server capacity after two years which will be met through the existing ICT revenue budget.
 - 9.1.3 Further savings will be recognised from:
 - 9.1.3.1 Property rationalisation as the current server room can be reallocated as office accommodation.
 - 9.1.3.2 Energy bills for power to servers and air conditioning will reduce.
 - 9.1.3.3 The Council's Technology Strategy 2014 2019 sets a clear direction for the Council to move to a "cloud" environment. As the Council moves towards "cloud" technology, servers within AWS will be able to be turned off, reducing the future annual charge. The Council also has the option to turn off servers, such as test servers, when not required and to not be charged whilst

turned off. ICT will manage the environment to ensure that the Council is receiving the lowest possible charge for use of the AWS environment.

- 9.1.3.4 The Council and Arcus Global Limited are able to sell or re-use the server capacity purchased when no longer required to reduce the overall spend over the two year contract period.
- 9.1.4 The available budget of £1.26m is included within the Capital Programme. Payments in respect of the migration element of the contract will be made via a milestone payment schedule, and payment in respect of the purchase of the AWS environment will be by upfront payment, as detailed in 8.3.

9.2 Legal and Procurement:

- 9.2.1 The Council has a Best Value Duty under s.3 of the Local Government Act 1999 to seek continuous improvement in the way its functions are exercised, having regard to a combination of economy, efficiency and effectiveness. The proposed Contract with Arcus Global Limited will enhance the delivery of ICT services across the Council whilst providing greater resilience.
- 9.2.2 The proposed Contract will be directly called off from the Crown Commercial Service G-Cloud 5 framework (contract ID: RM1557v). The framework was tendered using the Official Journal of the European Union (OJEU), open procedure. The framework is permitted for use by UK public sector bodies and the Council is named in the link in this regard within the OJEU Contract Notice.
- 9.2.3 The Council is able to call off from the framework agreement by direct award for periods of up to a maximum of 24 months, in accordance with the calling off procedures detailed within the framework agreement. Such call off contracts are compliant with The Public Contracts Regulations 2006.

9.3 Environmental

- 9.3.1 AWS has a long-term commitment to achieve 100% renewable energy usage for their global infrastructure footprint.
- 9.3.2 Cloud computing is inherently more environmentally friendly than traditional computing.
- 9.3.3 AWS introduced its first carbon-neutral region in 2011. The EU AWS region is carbon neutral.

10. DECLARATIONS / CONFLICTS OF INTEREST & DISPENSATIONS GRANTED

None.

11. BACKGROUND DOCUMENTS

Used to prepare this report, in accordance with the Local Government (Access to Information) Act 1985) and The Local

Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012

None.