

REPORT TITLE

Data Centre Procurement Strategy and Contract award

REPORT OF

Fabio Negro, Head of Technology

FOR SUBMISSION TO

Cllr Ali Demirci, Cabinet Member for Corporate Resources for Cabinet Member Signing
Ed Garcez, Shared Digital Chief Information Officer

Proposed Decision Date25th July 2107**SUMMARY OF REPORT**

This report considers the strategy for provision of data centres across the three councils of Camden, Haringey and Islington and seeks approval to complete the procurement exercise and award a contract for the provision of data centre services.

The Shared Digital Joint Committee approved a report in November 2016 which detailed the benefits to sharing data centre provision. The councils agreed to: rationalise their current data centres; undertake a procurement exercise to buy data centre services from a third party; and, migrate to the new service provider.

Local Government Act 1972 – Access to Information

No documents that require listing were used in the preparation of this report.

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WHAT DECISIONS ARE BEING ASKED FOR?

It is recommended that the Cabinet Member for Corporate Resources, (London Borough of Haringey), Shared Digital Chief Information Officer (London Borough of Camden and London Borough of Islington:)

1. Approves the procurement strategy endorsed by the SD Management Board for the procurement of data centre services through a third party supplier via a framework agreement; and,
2. Award a contract for the provision of data centre services to Crown Hosting Data Centre Limited.
3. The Chief Digital and Information Officer to report to the Shared Digital

Management Board once the final contract value has been ascertained setting out the year on year savings.

4. To note that the five year total contract value will be in the region of £4.5m, apportioned across all three councils based on services that each council consume and the final contract cost to be confirmed once the actual level of provision and data migration has been confirmed.

Signed by: Date:

1. WHAT IS THIS REPORT ABOUT?

- 1.1. In March 2016 the leaders of Camden, Haringey and Islington Councils agreed to share ICT services and will conclude the legal agreement later this year. The new service, Shared Digital (SD), will be responsible for delivery of all ICT services consumed across the three councils.
- 1.2. By sharing services, the councils are expecting to be able to provide ICT services more cheaply without a loss of service quality. The emerging ICT strategy to support this ambition seeks to consolidate and converge ICT infrastructure and will rent services rather than buying or building. This will reduce the level of infrastructure that needs to be maintained.
- 1.3. This initiative takes place against a background of operational concerns including budget pressures, exit dates for existing data centre locations, on-going hardware and software lifecycles, increasing demands for services and a changing security landscape.
- 1.4. The data centres underpin many of the ICT services available across the three councils. There are eight data centres across the three councils. The Shared Digital Joint Committee at its meeting in November 2016 agreed a strategy to rationalise and converge the data centres reducing the number of data centres to two.
- 1.5. The SD Management Board endorsed the procurement strategy to source data centre provision from a third party supplier via a framework agreement at its meeting in February 2017.
- 1.6. This strategy will allow the councils to rent data centre capacity which is scalable against the councils' requirements. The councils would only pay for the capacity used. This approach will move the costs of maintaining the data centre infrastructure from a mix of capital/revenue funding to revenue funded. There will be one-off project management costs to manage the migration to the new service provider.

2. WHY IS THIS REPORT NECESSARY?

- 2.1. The Shared Digital Joint Committee delegated the decisions on procurement strategy and the award of contract to a specialist supplier to the Chief Digital Information Officer. The formation of the procurement strategy is to be approved by the Shared Digital management Board. The contract value is estimated to be in the region of £4.5M for the 5 year maximum contract period. Under Haringey's Constitution, awards of contracts estimated at £500,000 or above are a key decision. Under the Council's Protocol for Key Decisions officers are prohibited from taking key decisions. Key decisions may only be taken in accordance with Cabinet Procedure Rules. This report seeks to award a contract for data centre services.

- 2.2. A key tenet of the emerging ICT strategy for the three councils is to converge and consolidate the infrastructure across the three councils. This allows the councils to reduce the cost of service through sharing resources and risk. The ICT strategy includes seeking to move services to cloud provision. The councils will rent software and infrastructure rather than buying or building, both of which add significant ongoing maintenance costs.
- 2.3. An important element in this programme will be the move to co-location data centres (colo). 'colo' is a data centre facility in which the councils can rent space for their servers, the colo usually provides the building, cooling, power, bandwidth and physical security. One of the main drivers for choosing colo is that it can reduce capital expenditure from maintaining their own location. The option will also allow scaling up or down without a financial penalty – the councils would only pay for what they use.
- 2.4. The project will 'lift and shift' the existing servers ensuring that data access and integrity is maintained. Each council will retain access only to the information that they manage.
- 2.5. This programme will directly contribute to the medium term financial strategy by delivering savings on the current cost of service.
- 2.6. By co-locating services the councils will reduce their environmental impact of having eight data centre sites within the council boundaries – operating on modern infrastructure that consume lower level of power and emit lower levels of heat.
- 2.7. It supports better engagement with residents and local communities by improving the availability of digital services, with service availability guaranteed to 99.98% leading to fewer incidences of loss of service. By improving accessibility to the services available from the data centres staff will be better placed to make informed decisions on issues raised with them by residents.

3. OPTIONS

- 3.1. In considering the options that are available to the councils, three assumptions have been made:

Assumptions

- **Decommissioning and service moving costs** - industry averages have been taken in estimating the cost to move the service. These figures were obtained during the soft market testing carried out with suppliers in December 2016.
- **Rack consolidation and projected growth** – it is assumed that the current estate of 105 racks will be reduced to 70, ensuring efficiencies of scale and racks are utilised to an optimum level providing the existing capacity requirements. There is no assumption on growth requirements

as the 'cloud first' principle for software should reduce the likelihood that additional rack space beyond 70 racks would be required.

- **Financial Evaluation** – Evaluation of each option is based on a total cost of ownership (TCO) which includes up-front investment costs, annual running and maintenance costs for in-house provision; and, procurement, migration and external hosting costs for external service provision. Both options include annual indexation at 3.5%.

Option Analysis [Alternative options]

3.2. Three options for data centre provision were considered:

- 1) do nothing – retain existing data centres;
- 2) retain service in-house, upgrade infrastructure; and,
- 3) procure through another service provider.

3.3. The table below provides an evaluation of each option:

Criteria	Do Nothing	In-House (Upgrade)	Third party provision
A high level of resilience,	No	Yes	Yes
High quality connectivity to major network providers with burstable bandwidth	No	Yes	Yes
A high level of security, both physical and electronic	No	No	Yes
Ability to rapidly commission and decommission servers as demand dictates	Yes	Partial*	Yes
Ability to rapidly and cost effectively commission and decommission racks as demand dictates	No	No	Yes
Managed service options and virtualisation	No, only with an outsource	No, only with an outsource	Managed Service and remote hands is an option via separate providers

*Partial the in house data centre option could be scaled but there is an upper limit due to power capacity and physical space available within the site.

- 3.4. Based on the criteria and assumptions noted above it is recommended that the council seeks data centre provision through a third party as this option most fully meets the councils' needs.

Procurement Strategy

- 3.5. At its meeting in November 2016, the Shared Digital Joint Committee delegated approval of the procurement strategy to the SD Management Board. To ensure compliance with each councils contract standing orders and authorisation thresholds, the decision to award a contract will be considered by the relevant cabinet member in LBH and LBI and the Chief Digital Information Officer in LBC.
- 3.6. A review of existing framework agreements has been undertaken. It is recommended that the councils' procure the data centre services through a framework agreement established by the Crown Commercial Services (CCS). This framework agreement has provided the lowest estimated pricing based against the councils' requirements for rack space, migration support and facility services required.
- 3.7. RM1069 – Crown Hosting Services is a single supplier framework agreement for the procurement of flexible contract hosting facilities. All three councils are named participants on the framework.
- 3.8. Crown Hosting Data Centre Limited (CHDC Ltd) is a joint venture between government and Ark Data Centre UK Limited (ADC Ltd). ADC Ltd were the successful bidders following a CCS OJEU procurement process to provide data centre facilities. The councils would contract with CHDC Ltd.
- 3.9. The services provided are easy to buy, highly efficient, co-location and data hosting on a flexible contract. The co-location facilities provide space, power, cooling, and physical security for the server, storage, and networking equipment of other firms and public sector bodies.

Contracting process

- 3.10. There are two stages to entering into a contract with Crown Hosting Services:

- The councils enter into a memorandum of agreement (MOA). This includes a non-disclosure agreement and provides the councils with access to the listing of detailed services and costs available through the data centre.

It also allows the councils to confirm the commercial model based on the number of racks and volume of data to be hosted. The final costing of the service will be based on the final number of racks required, support services and the migration costs.

- The second stage, once the commercial model and migration and data volumes have been agreed is the contract award.

3.11. The councils are under no obligation to award a contract during the MOA stage. Should the councils agree to contract with Crown Hosting Services, it is likely that the councils would wish to enter into a contract for a five year period. The contract value will vary during the life of the contract based on the volume of services consumed. There is no penalty for a reduction in services during the contract period, services are provided in a 'pay-as-you-go' basis.

3.12. Based on our current requirements, the annual cost of service will be approximately £0.9m. The likely total contract value for the five years will be £4.5m.

3.13. The contract value includes £1.1m in costs to decommission the existing eight data centres and migrate the servers to the new facility.

4. WHAT ARE THE REASONS FOR THE RECOMMENDED DECISIONS? [Reasons for recommendations]

4.1. The councils each have in-house provision for data centres currently. There are issues with maintaining the hardware for the data centres with hardware coming to end of life, and needing replaced. These costs are duplicated across all three councils and can be reduced through consolidating data centre provision.

4.2. By moving to third party provision of data centres, the councils can expect to see a drop in cost of service based on the 2015/16 operating costs of approximately £400,000 per year whilst improving business continuity through improved resilience and better disaster recovery. The savings will be realised through a reduction in the number of staff required to manage the service, which will be subject to consultation and also lower hosting costs as the councils will only pay for services used.

4.3. By co-locating services, and moving to a new data centre provider will reduce the councils' environmental impact. Existing hardware is end of life, consumes more power, and emits more heat. Using new data centre technology the power consumption and levels of heat emitted will be reduced.

4.4. Additionally, a standard set of facilities across all three councils would enable better control of each data centre's set-up and design. This is particularly relevant when considering the security design, ensuring that the councils can keep up to date with new security requirements, building on the recent penetration testing audit's findings.

4.5. Each council has an accommodation strategy to dispose of under utilised sites. Co-locating the data centres into a third party's sites would free up further accommodation space, aligning to the existing accommodation strategy.

- 4.6. This programme will directly contribute to the medium term financial strategy by delivering savings on the current cost of service.
- 4.7. It supports better engagement with residents and local communities by improving the availability of digital services, with service availability guaranteed to 99.98% leading to fewer incidences of loss of service. By improving accessibility to the services available from the data centres staff will be better placed to make informed decisions on issues raised with them by residents.

5. WHAT ARE THE KEY IMPACTS / RISKS? HOW WILL THEY BE ADDRESSED?

- 5.1. By changing the way in which data centre services are provided, there will be a drop in the number of data centres run by the councils. There will remain a very limited requirement for the councils to run some data centre services in-house. This will have an impact on staff who currently manage these services across the three councils. Less staff will be required.

Action – A target operating model for Shared Digital is being developed. This will include a restructuring of teams across all three councils. Staff affected by the data centre migration will be included in the staff consultation on the structure of the new target operating model for Shared Digital.

- 5.2. The councils’ data centres are hosted in various locations across the boroughs. The leases for these buildings are coming to end on differing dates. The lease for one of Haringey’s data centres is first to finish. Haringey will need to either migrate to the new data centre location before the lease finishes in March 2018 or extend the lease (if possible). This would incur additional costs for the council as well as sacrifice the savings available through rationalising the data centres into the new location.

Action – ensure contract is in place as soon as practical allowing enough time to migrate services without having to extend the lease.

6. WHAT ACTIONS WILL BE TAKEN AND WHEN FOLLOWING THE DECISION AND HOW WILL THIS BE MONITORED?

- 6.1. The table below provides a timeline of activity following approval of the recommendation in this report:

Activity	Date
Complete contract with supplier	Mid July 2017
Agree migration approach	End of August 2017
Plan migration	End of August 2017
Undertake migration activities	September to June 2018
Transition to new supplier complete	June 2108

7. CONSULTATION

- 7.1. There is no requirement to carry out any public consultation. The relevant cabinet members, executive finance directors and chief officers were consulted and approved of the approach.

8. OFFICER COMMENTS FOR THE LONDON BOROUGH OF CAMDEN AND ISLINGTON

LEGAL IMPLICATIONS

- 8.1. Legal services have reviewed this report in the light of the Public Contract in the light of the Regulations 2015 (the 'Regulations') and the Joint Committee's Terms of Reference governing the procurement activities of the ICT Shared Service.
- 8.2. On 8th November 2016 the Shared Digital Joint Committee agreed to delegate authority to the Chief Digital and Information Officer (CDIO) to procure cloud services via a specialist partner to include the formation of a procurement strategy. The delegation also covered the contract award. This was in accordance with the Joint Committee's power to delegate under its Terms of Reference. As stated, in the body of this report, the strategy was approved by the Shared Digital Management Board in line with the delegation.
- 8.3. The contract value is estimated to be in the region of £4.5M for the 5 year maximum contract period, as such the Regulations apply. The Council should be satisfied that the framework has been set up in compliance with the Regulations. The framework call-off procedure should be complied with and legal services should be consulted on the format of the call-off contract.
- 8.4. In addition, the Council is advised to consult legal services before an MOA is entered into, even though it is stated that there is no obligation to purchase services once the MOA is executed. Once the pricing is known the recommendation is for Shared Digital Management Board to be advised of the contract price before the contract is entered into.
- 8.5. The Council must take into account in coming to any decision the Councils' equality duties. In summary these legal obligations require the Council, when exercising its functions, to have 'due regard' to the need to 1. Eliminate discrimination, harassment and victimisation and other conduct prohibited under the Act; 2 to advance equality of opportunity between people who share a relevant protected characteristic and those who do not; 3. Foster good relations between people who share a relevant protected characteristic and those who do not (which involves tackling prejudice and promoting understanding). Under the Duty the relevant protected characteristics are: Age, Disability, Gender reassignment, Pregnancy and maternity, Race, Religion, Sex, Sexual orientation. In respect of the first aim only i.e. reducing discrimination, etc. the protected characteristic of marriage and civil partnership is also relevant.
- 8.6. The Public Services (Social Value) Act 2012 requires that public authorities letting service contracts consider how what is proposed to be procured might improve the economic, social and environmental well-being of the relevant area and how during the procurement it might act with a view to securing that

improvement. In fulfilling this duty the authority must (amongst other things) consider whether to undertake any consultation.

RESOURCE IMPLICATIONS

- 8.7. The estimated contract cost is £0.9m per annum across the three authorities, for a total estimated contract value of £4.5m over a five year period. The contract costs are dependent on the volume of services consumed, and estimates are based on the assumptions presented in section 3.1.
- 8.8. There is no obligation to purchase services following execution of the MOA, and there is no penalty for varying service volumes during the contract period. Services are provided in a 'pay-as-you-go' basis.
- 8.9. The final contract cost will be confirmed once the actual level of provision and data migration has been ascertained following review of the digital architecture across Shared Digital.
- 8.10. The estimated saving of £0.4m will be achieved through consolidation of infrastructure across the three authorities and reduction in staff and maintenance of the data centres, and will be realised during the restructure of staff within Shared Digital, and on the transfer and disposal of servers within the existing data centres.
- 8.11. Savings are dependent on volume of service required following consolidation, and progress will be recorded and reported to the Shared Digital Management Board. All savings realised will contribute to the total £6m Shared Digital savings target.
- 8.12. The transfer of services to a third party provider will also free up office space in the existing eight data centres, to facilitate existing accommodation programmes.

OFFICER COMMENTS FOR LONDON BOROUGH OF HARINGEY

LEGAL

- 8.13. Subject to compliance with procurement legislation, Haringey's Contract Procedure Rules provide that Haringey Council can let contracts by selecting a provider from a framework that has been established by a public sector body. The contract to which this report relates has been procured from the Crown Commercial Services Framework RM1069 (the "Framework Agreement"). As a local authority, Haringey can let contracts under the Framework Agreement. This complies with procurement legislation.
- 8.14. Haringey Council's Assistant Director of Corporate Governance sees no legal reasons preventing Haringey Council's Cabinet Member for Corporate Resources from approving the recommendations in the report.

PROCUREMENT

- 8.15. CCS Framework RM1069 provides a compliant route to procure the data centre service. The framework has only one supplier and provides an agreement that supports the transition to greater use of the Cloud solutions. The framework costs have been benchmarked and the framework offers the best value for

money. Based on the assumptions the Head of Procurement supports this strategy and award.

FINANCE

- 8.16. The saving outlined in this report is based on a financial model which compared data centre server usage based on comparative spend of 4 Kilowatts usage per server across the two sites rather than on actual costs paid by Haringey. The proposed saving is achievable in stages, as current contracts end and are assimilated into the new contract for a more cost effective solution.
- 8.17. The Shared Digital Management Board and the Shared Digital Joint Committee have reviewed the business case supporting this report. These groups will be regularly reviewing the progress of this project.

EQUALITIES

The Council has a Public Sector Equality Duty as set out in 8.5 of this report

The awarding of the contract to Crown Hosting Data Centre Limited will not have a direct impact on service users or residents accessing Council services. Any other decision relating to digital channel shifting and accommodation strategies will need to pay due regard to the Public Sector Equality Duty.

As there will be a drop in the number of data centres run by the Council, this will inevitably mean that less staff will be required. As a result, a target operating model will be implemented as part of the Shared Digital. Should this involve any restructure or redundancy, the Council will need to follow the relevant processes including undertaking restructure equality impact assessments.'

9. APPENDICES

- 9.1. Appendix 1 – Part II contains exempt information (NOT FOR PUBLICATION)

REPORT ENDS