

REPORT TO: THE MORAY COUNCIL ON 11 FEBRUARY 2010

SUBJECT: PROCUREMENT OF NEW DATA CENTRE

BY: CHIEF FINANCIAL OFFICER

1. REASON FOR REPORT

- 1.1 To seek approval to proceed with the procurement of a new data centre included in the 2010-11 Capital Plan.
- 1.2 This report is submitted to the Council in terms of the Council's Administrative Scheme relating to information technology.

2. RECOMMENDATION

- 2.1 Members are asked to approve the inclusion of a new data centre in the tender for the Aldi conversion.**

3. BACKGROUND

- 3.1 The Council's data centre comprises all the central computer servers used to run all the corporate systems, like email and document management and departmental application systems, like Council Tax and Housing along with all the data storage disks and tape backups associated with these systems. The data centre also comprises the hub of the Council's computer network which radiates out to virtually all other Council locations which require computer access of any kind. The data centre includes an emergency electricity generator and battery backup power supplies to protect all the computers in the event of a sudden power failure which could seriously damage the systems themselves and the integrity of the data contained within them.
- 3.2 The current data centre is housed in the ground floor of a two storey Victorian building located at the corner of Abbey Street and Greyfriars Street (usually referred to as just Abbey Street). The building, which was previously used as an electrical retail shop, was refurbished in 1992-93 to accommodate all the ICT staff of the Moray District Council ICT Section including the data centre.
- 3.3 Members have previously been advised about concerns in relation to the existing data centre by the Head of ICT Services and also of reports produced by the external auditors.
- 3.4 The general condition of Abbey Street and its appropriateness as a location for the Council's data centre was highlighted during the best value review of ICT services that was conducted during 2006-07 and 2007-08 and finally reported to Policy Committee on 5 March 2008 (para.6 of the minute refers).

There are currently physical constraints with the existing building together with issues of the build up of heat and potential for water ingress. The Best Value Review Improvement Plan included an action to review the accommodation stating that :

“The Abbey Street building is also not fit for purpose as a data centre and the Council is running an increasing risk of major service disruption the longer it remains there.”

- 3.5 Furthermore, the External Auditors in carrying out a Computer Services Review in 2007-08 highlighted the bad practice of storing computer equipment in the data centre which was put into practice by the ICT Section as a result of a lack of space elsewhere in the building.
- 3.6 This data centre, which originally housed only two servers in 1992-93, has gradually filled to full capacity over the intervening period and now houses around 150 servers and other associated ancillary equipment. The current data centre therefore has no room for any future expansion, which is of serious concern now as the Council is about to embark on a period of significant and sustained growth in its ICT investment as a result of the DBS programme.
- 3.7 It is also worth pointing out here that the Abbey Street building is, in any case, no longer fit for purpose as a modern data centre due to a number of factors, including condition, high maintenance, layout and proximity to the public roads running along two sides of it and therefore represents a risk to the Council in terms of service disruptions and business continuity. These facts have been recognised in recent years through property condition surveys although no suitable alternatives have been identified.
- 3.8 The refurbishment of the Aldi building is therefore an ideal opportunity to establish a modern and purpose built data centre that conforms to industry best practice in layout and design, reduces the risk of service disruption to an absolute minimum and future proofs the Council for the foreseeable future.

4. RELOCATING THE DATA CENTRE TO THE ALDI BUILDING

- 4.1 The ICT Section has been working closely with the DBS team to include the design and build of a new data centre as part of the overall contract for the conversion of the Aldi building. The aim is to achieve a fully serviced computer room into which the Council will install all its computers and network equipment some of which will transfer from the existing data centre and some will be new investment for DBS identified in the ICT capital plan.
- 4.2 The ICT Section provided an estimate of £600,000 for the cost of the new data centre by means of desk based research in order to establish a provisional allocation from the Capital Plan for 2010-11.

- 4.3 This estimate was then benchmarked against two other Scottish local authorities. Firstly, Dumfries and Galloway who have just completed the refurbishment of an old data centre and secondly, Aberdeen City Council who have recently carried out a detailed feasibility study for relocating its data centre from St. Nicolas House. Both the actual cost of the Dumfries and Galloway data centre and the estimated cost of the Aberdeen City Council data centre were £600,000.
- 4.4 It is important for Members to note that all local authorities operate roughly the same number of computer servers in their data centres as the services they provide are more or less the same. This means that the size and specification of their data centre should all be similar and this was confirmed by comparison between Moray Council and these other two local authorities.
- 4.5 More recently, the ICT Section has liaised closely with Mace, the Council's advisor on the Aldi conversion and with Buro Happold their (Mace's) mechanical and electrical specialists, in the development of the specification for the new data centre.
- 4.6 The specification for the data centre has been designed to identify both the short term and longer term requirements of the Council in order to future proof the investment and avoid the need for any significant major expenditure as requirements change in the future.
- 4.7 The cost of the data centre includes some of the following major items of expenditure :
- (a) Racking for computers, data storage and network equipment
 - (b) Cooling system and associated pipe work
 - (c) Power and power distribution (incl. upgrade to local sub-station)
 - (d) Fire Protection System
 - (e) Environmental Monitoring
 - (f) Security
 - (g) Raised Flooring
 - (h) Uninterruptable Power Supplies
 - (i) Emergency Standby Generator
- 4.8 The cost of the data centre excludes the following :
- (a) Computer Servers
 - (b) Data storage equipment
 - (c) Data Networking Equipment
- 4.9 Mace has advised the Council that it could likely meet its specification for the new data centre for around £600-700,000.

5. BACKUP DATA CENTRE

- 5.1 At the same time as developing the specification and estimated cost for a new data centre, consideration has also been given to establishing a much smaller backup data centre in order to provide for disaster recovery and business continuity planning purposes. This was considered necessary in view of the business critical nature that ICT has now become due to the high reliance placed on it by the service departments and especially in underpinning the new ways of working to be introduced by DBS which will be heavily based on ICT.
- 5.2 The Estates Section has recently carried out an evaluation of three options for the location of such a backup data centre, namely retaining Abbey Street, Council HQ and a remote location. A report was subsequently presented to the DBS Property Theme Board on 1 February 2010 recommending the Council HQ building on the basis that it could be done at no additional cost to the Council and that there would still be sufficient capacity in HQ to house all the staff affected by the Elgin office rationalisation project.
- 5.3 Although the report on the backup data centre contained a high level financial appraisal of the capital and revenue implications of the three options, there has been no provisional capital allocation sought from the Capital Plan for 2010-11.

6. SUMMARY OF IMPLICATIONS

(a) Corporate Development Plan/Community Plan/Service Improvement Plan

The proposals contained in this report support the requirements of the Community Plan, the Corporate Plan and Departmental Service Plans.

(b) Policy and Legal

No policy or legal implications.

(c) Resources (Financial, Risks, Staffing and Property)

The estimated cost of establishing a new data centre in the Aldi building is in the range £600,000 to £700,000. A provisional allocation of £600,000 has been made against the Capital Plan for 2010-11.

(d) Consultations

The DBS property Theme Board has been consulted during the development of plans to establish a data centre in the Aldi Building.

7. CONCLUSION

- 7.1 Members are asked to approve the inclusion of the data centre in the tender for the Aldi conversion.**

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Background Papers: Report to DBS Property Theme Board on 1 February 2010
Data Centre Assumptions and Calculations

Ref: AK/LJC/735358