

Clause embodied in Report No. 3 of the Audit Committee, as adopted by the Council of the City of Toronto at its meeting held on February 13, 14 and 15, 2002.

3**Interim Report -
Oracle Database Software Acquisition**

(City Council on February 13, 14 and 15, 2002, adopted this Clause, without amendment.)

The Audit Committee recommends that:

- (1) the following joint report (February 6, 2002) from the Chief Administrative Officer and the City Auditor be adopted; and**
- (2) the Executive Director of Information Technology:**
 - (a) review whether licences should be paid by individual departments; and**
 - (b) consider the use of “microsoft sequel server”.**

The Audit Committee submits the following joint report (February 6, 2002) from the Chief Administrative Officer and the City Auditor:

Purpose:

The purpose of this report is to provide a preliminary assessment of a review into the City's purchase of Oracle Database software licences during the Y2K project. This is the first in a number of reports on the management of the Y2K projects.

Financial Implications and Impact Statement:

There are no financial implications contained in this report.

Recommendations:

It is recommended that:

- (1) the City Auditor further investigate this contract including interviews with key participants as required;**
- (2) the Corporate Services Information and Technology Division immediately assume responsibility for the management of all city-owned Oracle licences;**

- (3) the Executive Director of Information and Technology and appropriate City staff be directed to explore all possible options to reduce the City's financial obligations; and
- (4) the appropriate City Officials be authorized and directed to take the necessary action to give effect thereto.

Background:

Oracle Database

Oracle Database, like many databases, is priced according to the number of individuals who will be using the software. Each user requires a user licence (also often called a 'seat'). In addition there are usually different types of licences for different types of users. In the case of Oracle, there are two main types of licences referred to as a full use (or enterprise) licence and a runtime licence. The former is a more comprehensive licence that allows a licensee to use multiple applications accessing multiple Oracle databases. The 1999 price for an Enterprise licence would be about \$1800 if purchased individually and without discount. This does not include annual maintenance and support fees. A runtime licence limits the user to accessing a single application using Oracle Database engine. The pricing of runtime licences varies because the licenses are bundled and resold by the business application vendors. Our experience with one application indicates that it can vary between \$175 to \$400 per seat based on the type of application. When a runtime licence is embedded in a larger application the annual maintenance fee is paid as sub-component of the larger application maintenance fees.

City of Toronto Acquisition Process

During 1998 and 1999, Oracle Corporation a vendor of database software, had been making sales approaches to the City. At the time, the City owned and used Oracle and other databases for a variety of City business applications. Oracle was proposing that the City purchase 10,000 Oracle enterprise licences to consolidate or upgrade existing Oracle Database licenses used in City applications, and to provide additional Oracle Database licenses for the development of new applications, such as electronic service delivery, and internal employee self service systems. The number of licences recommended was based on an estimate of Oracle licences done in late 1997 by senior Information and Technology staff of the former municipalities. The one page analysis suggested that the City might need up to 17,000 Oracle licences by 2002. However, Oracle indicates that the document was provided to them and they chose to use it as the foundation for their proposal that the City purchase 10,000 licences.

In November of 1999, the Director of the Y2K project met with Oracle representatives who made a presentation to her. Included in that presentation was the recommendation by Oracle that the City should purchase 10,000 licences to allow for future growth, and new applications that could be built on the Oracle foundation. On December 30, 1999 the Y2K Director made a verbal recommendation to the Y2K Steering Committee that the City purchase the 10,000 licences. This meeting was one day before the Y2K rollover. The minutes of the December 30th meeting indicate that the attendees were: The former Executive Director of Information Technology, the former CFO, the Director of the Y2K Project, the Assistant Director of the Y2K Project, and a minute taker. Former Councillor O'Brien, the Chair, was not in attendance. The committee

recommended the purchase. Although the purchase was approved at that meeting, the approval is only documented as an addition to the January 6, 2000 minutes of the Y2K Steering Committee.

Present at the January 6th meeting were the former Executive Director of Information Technology, the former CFO, the Director of the Y2K Project, the Assistant Director of the Y2K Project, and a minute taker. Former Councillor O'Brien was again unable to attend. The Steering Committee approved the purchase of 10,000 seats of Oracle, for five years, at a purchase price of \$11,336,651 which includes the cost of the licenses (after a credit of \$1,558,836 for existing licences) and \$8,456,387 for annual support over a five year period.

The purchase approval was walked into the former CAO by the Y2K Director on December 31st 1999, the eve of the Y2K rollover. He approved the purchase under the special Y2K spending authority granted him by Council, on the understanding that it was recommended by the Y2K steering committee. The former CAO signed the 'Year 2000 Delegated Approval Form,' which was also signed by the Director of Purchasing, the Y2K Project Director, and the former CFO. The justification on the Year 2000 Delegated Authority form suggests that the "...Agreement is a consolidation of licences that were previously held by third party vendors, e.g., SAP, ESCOM, and separate licence agreements with each operating department." As indicated below, this is not entirely accurate. The Director of Purchasing indicates that he signed the form based on the approval by the Y2K Steering Committee.

A contract was negotiated with Oracle for the purchase. The contract for the software was executed on January 5, 2000. The contract was signed by the CFO of Oracle and the former CFO for the City. The contract was reviewed by outside lawyer Mark Fecenko of Fasken Martineau DuMoulin LLP.

Other than contractual documents, a brief reference in the minutes of the Y2K steering committee, and the Y2K Delegated Approval Form, no documentation has been found to justify the selection of the product, or the magnitude of the purchase. Interviews to date appear to confirm that no documented justification was prepared and that the decision was made based on verbal briefings. In an interview with the Director of Y2K conducted by KPMG, she indicated that an issue that she had with the Oracle licences at the time of the Y2K rollover was whether all of the licences in use were actually licensed. She said that there was a concern that if there was a Y2K-related failure that the City would likely not have recourse to Oracle if there were unlicensed applications. This was her explanation for the apparent haste in respect of the oracle transaction as January 1, 2000 approached.

Operational and Financial Issues

In retrospect, the decision to purchase 10,000 seats of software was a serious miscalculation. At no time since 1999 has the City needed more than a fraction of the 10,000 enterprise licences purchased. It is highly unlikely that the City will need that number of enterprise licences in the foreseeable future. The City's two large scale applications using Oracle Database as referenced in the "Year 2000 Delegated Approval Form" already have the use of approximately 6500 runtime licences that the City owns as part of the original SAP and CLASS purchase. Unless a SAP or CLASS user actually uses another application using Oracle Database, there is no

defensible economic reason to “trade-in” or “upgrade” the runtime license to an enterprise one. There is no indication that an in-depth investigation was conducted to justify the upgrade of the runtime licenses to enterprise licences.

Furthermore, even if the City received a credit for the cost of these runtime licenses, as the purchase agreement suggests, the maintenance that the City pays the original application vendor continues in addition to the new maintenance now charged by Oracle. In short, the City appears to be paying software maintenance fees twice on the same licences.

The issue of how many licences the city actually needs is, however, complex. At present, Information and Technology does not manage all Oracle Database licenses within the City. A further review and audit of the number of other Oracle Database licenses (full use and runtime) within the City and a more accurate projection of the City’s database usage needs are essential in order to fully articulate the implications of this 10,000 license purchase. However, it is clear that the City needs and is using only a small number of Oracle enterprise licences, possibly less than 1000. The City does need a larger number of runtime licences, likely in the range of 7500, of which 6500 had been purchased and paid for prior to the purchase of the new 10,000 licences. Therefore, by any measure the purchase of 10,000 enterprise licences was excessive and unnecessary.

There is no evidence that the purchase was operationally necessary to be ready for Y2K. It would appear that the purchase was primarily a harmonization initiative. As a result it is questionable whether it was appropriate to use the special Y2K purchasing process rather than normal purchasing procedures.

For reasons that are also unknown, a decision was made in January of 2000 to lease the Oracle software from MFP. It is unclear what advantage might have been anticipated by leasing the software except possibly to level the payments over the five-year term. However, the contract with Oracle already allowed for multi-year payments by the City, albeit with a larger first year payment.

On February 1, 2000, the City began a lease of the Oracle software structured to last 4 years 11 months, the lifespan of the licences. The total City payments on the lease are \$13,056,080, approximately \$1.7 million more than the direct purchase price. The \$1.7 million is the financing charge for the lease. Moreover, the leasing decision also makes renegotiations of the contract much more complicated. The Oracle contract allows the City to reduce the annual maintenance costs on a year to year basis, based on the number of licences actually in use. This means that the City could reduce the amount owing Oracle under the contract, possibly significantly. However, even if the City reaches an agreement with Oracle to reduce its maintenance costs, it has a separate agreement with MFP to pay the full financing amount. In short, the decision to lease may eliminate the opportunity to reduce the City’s obligations to Oracle.

During negotiations with MFP in the fall of 2001, the issue of the Oracle lease was repeatedly raised by City staff as an area where major change was necessary. A variety of options were discussed including collapsing the lease, reducing the size of the lease (if a renegotiated deal would be reached with Oracle) or buying out the lease. MFP agreed to allow the City to buy out

the lease, subject to the contractual penalties. This was of no advantage to the City. The penalties in the contract for breaking the lease essentially required the City to pay the full amount of the lease.

If the City was able to reduce the size of its Oracle contract, MFP offered to allow the City to backfill the capital difference in the lease with other leased assets of the same value. However, this arrangement would still require the City to pay the entire obligation on the lease, albeit on a different mix of assets. This arrangement was also deemed to be of little value to the City. In short, MFP offered no solution that would relieve the City from carrying out its full contractual financial obligations under the lease.

As well, KPMG identified that the City was owed \$430,000 as a result of the unusual structure of the lease that resulted in MFP making payments to Oracle on behalf of the City throughout the term of the lease instead of at the start of the lease period. While MFP agreed as part of the proposed settlement agreement to reimburse the interest to the City, they would not entertain eliminating or reducing the lease.

On January 31, 2002 the Executive Director of Information and Technology met with representatives of Oracle to explain the City's situation and to seek solutions. Oracle has committed to working with the City to find ways to reduce the City's ongoing commitments. It should also be stated that Oracle has been very helpful in assisting staff in understanding the decision process of 1999.

Comments:

In 1999, during Y2K preparations, a decision was made by the Y2K project office to purchase 10,000 licences of Oracle software. There is no documentation to indicate why the specific product, or number of licences, was selected, or why the agreement was required to remediate a Y2K date issue. The recommendation was made to the Y2K Steering Committee by the Director of Y2K. The Committee endorsed the purchase, and based on that endorsement, the purchase was approved by the former CAO.

The purchase has proven to be seriously flawed decision with potentially significant financial consequences for the City. The City is now using only a small number of the 10,000 enterprise licences, and is unlikely to use any more before the end of the contract. The decision to lease greatly complicates renegotiations of our contractual arrangement with MFP. However, City staff are working with Oracle to identify mechanisms to reduce the City's obligation.

Conclusions:

The preliminary review of this contract indicates that a major Y2K related spending decision was made with little or no documented justification or financial analysis. As well the purchase approval process appears to be inappropriate for the type of purchase. Finally, the subsequent decision to lease, greatly limits the City's operational and financial flexibility.

Further interviews are required, as well as a detailed examination of the City's Oracle licence holdings and needs. As well City staff will undertake a full verification of the licence costs, and the credit received for previous licences.

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