

OSBM

**INFORMATION TECHNOLOGY
PROCUREMENT**

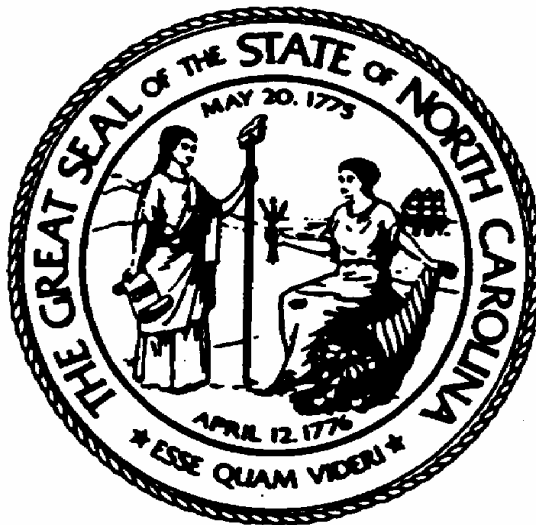
Management Study

As Directed by Session Law 2005-276, Section 9.8

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Prepared By:

Office of State Budget and Management



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INTRODUCTION

Scope of Study

Section 9.8 of Session Law 2005-276 directs the Office of State Budget and Management (OSBM) to conduct a cost comparison study on information technology (IT) purchases by the Office of Information Technology Services (ITS) and The University of North Carolina System with the specific objectives as outlined in the provision below:

INFORMATION TECHNOLOGY PROCUREMENT

SECTION 9.8. For purposes of purchasing hardware, software licenses, and multiyear maintenance agreements, The University of North Carolina and its constituent institutions may participate in the aggregation of purchasing administered by the Office of Information Technology Services, as defined in G.S. 147-33.72F. **The Office of State Budget and Management shall conduct a cost comparison study of hardware, software license, and multiyear maintenance agreement purchases made by The University of North Carolina and its constituent institutions and by the Office of Information Technology Services, to determine if further aggregation is cost-justified. The Study shall also include an analysis of aggregated purchases by the University System and the effect of educational discounts available to the University System.** The report of comparative unit costs shall be completed by December 31, 2005.

Methodology

In order to conduct the study, the OSBM study team performed the following tasks:

- Reviewed applicable NC General Statutes, administrative code, policies, and procedures regulating IT procurement,
- Reviewed current aggregation practices for information technology purchases,
- Collected IT procurement data from ITS and the UNC System on hardware, software license and multi-year maintenance agreements,
- Interviewed staff in the Office of Information Technology Services, the University of North Carolina, and the Division of Purchase and Contract, and
- Analyzed hardware, multi-year maintenance agreement, and software licensing purchases.

BACKGROUND

The responsibility for the procurement of all IT for state agencies, except the University of North Carolina and its constituent institutions, was transferred to ITS from the Division of Purchase and Contract with the passage of Senate Bill 222 during the 1999 Session of the General Assembly. The 2004 Session, with the passage of Senate Bill 991, enacted further changes strengthening the role of ITS in IT procurement including the aggregation of IT purchases where appropriate. Special provisions passed during the 2003 and 2004 Sessions of the General Assembly permitted ITS to enter into a limited number of multi-year maintenance agreements.¹

For the purposes of purchasing hardware, software licenses, and multi-year maintenance agreements, the University of North Carolina and its constituent institutions may elect to participate in the aggregation of purchasing administered by ITS.

¹ The special provisions defined multi-year maintenance agreements as those where the terms of those maintenance agreements do not exceed three years and require payment of the full purchase price at the beginning of the maintenance period.

FINDINGS

Hardware Purchases

ITS made its first bulk purchase of hardware, including desktop and laptop personal computers (PC's) and printers, in November 2004 after aggregating the purchase requests from state agencies. Several bulk purchases of hardware have been completed by ITS since that date. Approximately 13,000 PC's and 3,900 printers have been purchased through the aggregation administered by ITS during this period. ITS indicates that there has been an accumulated savings of about \$6.7 Million when comparing the bulk purchase prices to the current State term contract prices. Table 1 lists the specifics of each bulk purchase from November 2004 through November 2005. State agencies are permitted to select between a "basic" and a "high-end" PC. Most agency requirements for PC's can be satisfied with one of these two selections; however, if the agency can provide justification for the need of another machine with different specifications or can provide justification for purchasing between bulk purchase dates, ITS will consider an exception on a case by case basis.

Table 1
Desktop/Laptop and Printers Savings with Bulk Purchasing

Date	Number of Desktops	Number of Laptops	State Term Contract Price	Final Bid Price	Amount Saved
Nov 2004	3,429	678	\$ 5,703,303	\$ 5,087,998	\$ 615,305
Jan 2005	2,901	687	\$ 5,476,383	\$ 4,031,955	\$ 1,444,428
Apr 2005	1,430	679	\$ 3,835,523	\$ 2,316,643	\$ 1,518,880
Sept 2005	2,183	1,008	\$ 5,758,824	\$ 3,144,595	\$ 2,614,229
Sub Total	9,943	3,052	\$ 20,774,033	\$ 14,581,191	\$ 6,192,842

Date	Number of Printers	State Term Contract Price	Final Bid Price	Amount Saved
Nov 2004	380	\$ 444,330	\$ 382,129	\$ 62,201
Jan 2005	506	\$ 335,176	\$ 304,341	\$ 30,835
Mar 2005	364	\$ 216,829	\$ 196,465	\$ 20,363
Apr 2005	682	\$ 833,237	\$ 606,476	\$ 226,761
July 2005	202	\$ 112,371	\$ 103,373	\$ 8,998
Sept 2005	934	\$ 800,897	\$ 675,936	\$ 124,962
Nov 2005	802	\$ 241,034	\$ 210,335	\$ 30,700
Sub Total	3,870	\$ 2,983,874	\$ 2,479,054	\$ 504,820

Grand Total PC's and Printers \$ 23,757,908 \$ 17,060,246 \$ 6,697,662

As previously stated, institutions of the University of North Carolina are permitted but not required to participate in these aggregated purchases administered by ITS. To date, the institutions have elected not to participate. That's not to say that the System has not aggregated any purchases, it just hasn't participated in the ITS administered bulk purchases. While the University System purchases numerous "administrative" PC's much like any state agency would purchase, it also has specific PC configuration requirements in the academic areas that the ITS "basic" and "high-end" model selections will not satisfy. For the purposes of this study, we were unable to determine the breakdown in the number of purchases between the "administrative" and the "academic" areas.

In order to approximate an "apples to apples" comparison between the cost of PC's purchased by ITS in its bulk purchases and those purchased by the University System including any educational discounts received, the models that won the bulk purchase bids were selected for comparison.

Table 2 compares the prices paid by state agencies for the selected PC models during ITS bulk purchases for calendar year 2005 to the prices paid for those same models by institutions in the University System during the same time periods along with the difference in prices. The

Table 2
Difference in Bulk Purchasing Pricing Compared to University Purchase Price

January 2005		Basic Desktop	High End Desktop	Basic Laptop	High End Laptop
		Optiplex GX280	Optiplex GX280	450E	M675
Bulk Pricing	\$	798.04	\$ 1,094.36	\$ 1,279.00	\$ 1,550.00
University Average Price		N/A	\$ 1,090.02	\$ 1,860.00	\$ 1,980.69
Difference			\$ (4.34)	\$ 581.00	\$ 430.69

April 2005		Basic Desktop	High End Desktop	Basic Laptop	High End Laptop
		Optiplex GX280	Optiplex GX280	Latitude D610	Latitude D810
Bulk Pricing	\$	774.72	\$ 921.54	\$ 1,208.62	\$ 1,561.44
University Average Price		N/A	\$ 1,090.02	\$ 1,869.60	\$ 2,645.00
Difference			\$ 168.48	\$ 660.98	\$ 1,083.56

September 2005		Basic Desktop	High End Desktop	Basic Laptop	High End Laptop
		Optiplex GX620	Optiplex GX620	M460E	M460E
Bulk Pricing	\$	765.44	\$ 856.77	\$ 1,155.00	\$ 1,285.00
University Average Price		N/A	\$ 1,078.79	N/A	\$ 1,561.00
Difference			\$ 222.02	\$	\$ 276.00

Includes Monitor
N/A - Not Applicable

UNC system prices reflect the educational discounts, if any, received on those specific models. The reader should note that the same model PC won both the "basic" and the "high-end" categories in the ITS bulk

purchases. Since the UNC data received was in such a form that OSBM could not distinguish between “basic” and “high-end,” after discussions with UNC study representatives, OSBM used the “high end” category for comparing the desktops.

While ITS hasn’t established any standard configurations for printers, several Hewlett Packard printer models purchased both in the bulk purchases and by the University System during the same time periods were selected for comparison. Those comparisons are shown in Table 3 below.

Difference in Bulk Purchasing Pricing for Printers Compared to University Purchase Price						
	Model 3700	Model 4650dn	Model 4650dtn	Model 5550dn	Model 5550dtn	
State Agency Bulk Pricing	\$ 1,717.00	\$ 1,952.00	\$ 2,717.00	\$ 3,184.00	\$ 4,246.00	
University Unit Price	\$ 1,766.00	\$ 2,175.09	\$ 2,992.00	\$ 3,507.00	\$ 4,552.00	
Difference	\$ 49.00	\$ 223.09	\$ 275.00	\$ 323.00	\$ 306.00	
	Model 1160	Model 1320	Model 1320n	Model 2420d	Model 4250n	Model 4250tn
State Agency Bulk Pricing	\$ 297.25	\$ 334.67	\$ 481.00	\$ 593.00	\$ 1,496.25	\$ 1,301.17
University Unit Price	\$ 286.00	\$ 347.00	\$ 434.00	\$ 557.00	\$ 1,510.00	\$ 1,287.00
Difference	\$ (11.25)	\$ 12.33	\$ (47.00)	\$ (36.00)	\$ 13.75	\$ (14.17)

Software Licensing

To date, ITS has aggregated the software licensing requirements of state agencies into three Enterprise Software Licensing agreements (ELA’s) with SAS, ESRI, and Novell. ITS estimates that the savings will be approximately \$5.0 Million over five years for these three agreements. Since the University System formalized the coordination of IT acquisitions in 2000, it estimates a savings of \$150 Million across all software licensing activities. Additionally, since 2000, SAS has granted the University System the use of their software at no charge. The University System has also aggregated the software licensing requirements of individual institutions into several ELA’s including SCT, Adobe, ESRI, and Blackboard among others. In addition to the savings accruing to the University System through the aggregation of software licensing requirements, educational discounts range up to 87%.

The only ELA that could be identified for comparison between ITS and the University System is the agreement with ESRI. The ESRI ELA covers geographical information system (GIS) software. The average annual cost for the ESRI ELA negotiated by ITS for a five-year period is about \$620,000 compared to an annual cost for the University System of \$157,000 for a five year period.² As can be seen by the comparison, the effect of the educational discounts in software licensing is substantial. Both ITS and the University System continue to review potential ELA’s.

Multi-Year Maintenance Agreements

For the purposes of this study, multi-year maintenance agreements are those where the terms of the agreements do not exceed three years and require payment of the full purchase price at the beginning of the maintenance term. Pursuant to the special provisions mentioned earlier and passed by the 2003 and 2004 sessions of the General Assembly, ITS has entered into a total of eight multi-year maintenance agreements. For these eight agreements, ITS has identified a savings or cost avoidance of \$6.5 Million. Table 4 on the next page depicts the vendor, contract terms, contract value, and cost savings associated with each contract.

² The ITS ESRI agreement covers approximately twice the number of users than the University System agreement.

Table 4

Multi-Year Maintenance Agreements for State Agencies, FY 2004-2005

Company	Type of Contract	Contract Term	Contract Value	Savings or Cost Avoidance	Year
Progress Energy	Circuit Maintenance	5 Years	\$ 127,000	\$ 27,000	2003
Strohl	SW Business Impact	4 Years	\$ 476,000	\$ 586,000	2003
BMC Software	Mainframe & Software	3 Years	\$ 1,210,000	\$ 420,000	2003
Cisco Network	Networking & Hardware	3 Years	\$ 3,905,000	\$ 1,457,641	2003
Compuware	Mainframe & Software	3 Years	\$ 3,300,000	\$ 572,673	2004
BMC Software	Mainframe & Software	4 Years	\$ 7,100,000	\$ 3,178,307	2004
SEA	Mainframe & Software	2 Years	\$ 204,292	\$ 138,665	2004
Allen Systems	Mainframe & Software	3.5 Years	\$ 653,000	\$ 172,908	2004

Source: ITS

The University of North Carolina and its constituent institutions do not have any multi-year maintenance agreements as described above. They do have many multi-year agreements in which they negotiate a discounted annual price in year one that the vendors will honor for multiple years, but the universities are not bound contractually to renew each year. Just as with ELA's, the University System reports receiving educational discounts for these type agreements up to almost 100%.

CONCLUSIONS

Based on the findings of the study the following conclusions were reached:

- While the University System has not participated in the ITS bulk purchases to date, aggregation of IT purchases at the enterprise level within the System has taken place through the efforts of UNC CAUSE³ and other collaborative efforts.
- Further aggregation of hardware purchases to include University System administrative PC's and printers may result in lower prices for both state agencies and the University System.
- The University System should be allowed to negotiate a limited number of multi-year maintenance agreements such as those which the Legislature has allowed ITS to enter.
- The affect of educational discounts received by the University probably outweigh the benefits of further aggregation of software licensing through ITS.

It should be noted that prices for desktop and laptop computers and printers have continued to decrease over time and that aggregation of purchases internally by state agencies and institutions have also resulted in lower prices. Consequently, it cannot be determined with any degree of accuracy how much of the lower prices achieved during the bulk purchases result directly from the aggregation at the enterprise level.

ACKNOWLEDGEMENTS

OSBM wishes to express its appreciation to ITS, the University of North Carolina General Administration, and the Division of Purchase and Contract for their cooperation during this study.

³ UNC CAUSE is a group formed in 1970 by the computing centers of the 16-campus University of North Carolina for the purpose of promoting cooperation and information exchange between the campuses of the UNC System in all areas related to information technology.