UNIVERSITY OF TEXAS ARLINGTON

TELECOMMUNICATIONS OPERATIONAL REVIEW/PHYSICAL CONTROLS AUDIT

JANUARY 25, 2013

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MEMORANDUM

TO: James D. Spaniolo
President

FROM: Ken Schroeder Ken Schroeder
Director of Internal Audit

DATE: January 31, 2013

SUBJECT: Telecommunications Operational Review/Physical Controls Audit Report Dated January 25, 2013

Executive Summary

We have completed the Telecommunications Operational Review/Physical Controls audit as included in our FY 2013 annual audit work plan. The objective of this audit was to:

- Conduct an audit of the Telecommunications process charges, charge backs and fiscal budget controls;
- Verify whether there are good controls in place to monitor the billing and charges received from the telephone companies;
- Ensure that the inventory as listed in the Telecommunications inventory records agrees with what is physically accounted for; and
- Review any pertinent vendor contracts for services.

Our testing indicates that, overall, Telecommunications has good controls over their operating procedures and monitoring of the departmental billing and charges received from the telephone companies. Their capital assets are adequately safeguarded and accurately reported. However, the department did not keep an inventory of their high-risk assets. We also noted that their operating policy on cell phones, listed on the University's procedures website, was no longer applicable to the department. These findings are not considered significant to the University. We believe the recommendations included in this report will assist the Office of Telecommunications in correcting the above noted deficiencies.

We appreciate the courtesy and cooperation we received from the staff of the Office of Telecommunications throughout this audit.

If you have any questions, please contact me at extension 2-2018.

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MEMORANDUM: January 31, 2013
SUBJECT: Telecommunications Operational Review/Physical Controls Audit
Report Dated January 25, 2013

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Ms. Kelly Davis, UT Arlington, Vice President for Business Affairs and Controller
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Report File

Background Information

In July 2011, the Telecommunications Department (hereinafter referred to as the department or Telecommunications unless otherwise noted) became part of the Office of Information Technology (OIT). Telecommunications is a $1.5 million operation annually. University Procedures 12-1 to 12-4 cover most of the operating procedures of the department.

The University's telephone system is a Private Branch Exchange (PBX) manufactured by Nortel (Northern Telecom). The PBX including instruments, lines, voicemail and voice switching equipment (switch) is owned by the University. Telecommunications mainly works as a cost-recovery operation. The system upgrades, expansion and associated costs are financed by a monthly charge to each of the according departments for the number of telephones installed and the particular service(s) provided on each instrument. All telephones on campus are restricted against long distance calling unless a long distance authorization code has been properly requested and approved by the department head and issued to the caller by Telecommunications. Requests for telephone moves, changes, installations and removals should be forwarded in writing to Telecommunications by the department head or his/her designee.

The rates for the telephone company charges were set in the 1980s via the TEXAN agreement – authorized by House Bill 2128. The DIR (Department of Information Resources) maintains an agreement with AT&T as the local exchange carrier for long distance service. The department uses software called Telemaster (developed by Telesoft) which interfaces with the switch. The switch is the server/grid of telephone lines. The Telemaster stores information about each phone user such as the type of phone, type of phone line (whether single line or multiline), whether voicemail is enabled or not, details of the long distance calls, etc. At month end, reports are run out of Telemaster that are sent to production control at OIT. The production control division has a program that reformats the Telemaster reports into a DEFINE-readable format. The information is then input into DEFINE to generate the monthly billing. These monthly billing statements are sent to the Office of Accounting and Business Services, who in turn distributes them to the according departments. The monthly bill includes an itemized listing of all long distance charges as well as other monthly recurring charges - i.e. voicemail, call forwarding, program change, etc. These charges are recouped by Telecommunications via automatic interdepartmental transfers (IDTs) from the user's department.

Objective

The objective of this audit was to:

- Conduct an audit of the Telecommunications process charges, charge backs and fiscal budget controls;
- Verify whether there are good controls in place to monitor the billing and charges received from the telephone companies;

- Ensure that the inventory as listed in the Telecommunications inventory records agrees with what is physically accounted for; and
- Review any pertinent vendor contracts for services.

Scope and Methodology

Our examination was conducted in accordance with the guidelines set forth in the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing* and *Generally Accepted Government Auditing Standards*. The *Standards* set criteria for Internal Audit departments in the areas of independence, professional proficiency, scope and performance of audit work, and management of the internal auditing department. UTS 129 titled, "Internal Audit Activities" requires that we adhere to the *Standards.*

To achieve the audit objective, we reviewed Telecommunications policies 12-1 through 12-4 listed on the University's procedure website, conducted interviews with the Telecommunications staff, and performed walk-throughs of their operating systems and procedures. The scope of this audit included the operations and financial transactions of the department for FY 2012.

Audit Results

Phone Installations/Cancellations/Service Changes/Repairs

The largest operating cost component for Telecommunications is the cost of equipment and the monthly rental/services charges associated with it. Telecommunications offsets their cost of equipment and services by recouping the cost from the other departments by way of one-time charges for new phone sets and its installation, and/or service changes on existing phones. They also charge departments on a monthly basis for the services provided on the phones such as voicemail, multi-line functions, etc. In order to determine the accuracy of the Telecommunications process charges and chargebacks, we began our testing by reviewing the controls around installation, cancellation, service changes and repairs. In order to accomplish this objective, we performed the following steps:

- Selected a sample of work orders for the above-mentioned services and ensured that proper documentation for the service request exists.
- Verified whether an account and user profile was created or existed or deleted (if cancelled) in Telemaster for each of the phone extensions selected.
- Determined whether the phone line was programmed into/out of the switch.
- Determined whether the phone was installed at/removed/repaired at the requesting department.

For all the samples tested, the service request was documented and a work order was created. Work orders are generally not created for repairs. We did not find any exceptions to the testing criteria above.

Long Distance Codes

Another component of the Telecommunications' operating cost and billing is the long distance charges incurred by departments on campus, which is also reimbursed to Telecommunications via interdepartmental transfers. Procedure 12-2: *Long Distance Calling* states that "All telephones on campus are restricted against long distance calling unless you have been approved for and issued a long distance authorization code." These codes must be properly requested and approved by the department head and are then issued by the Telecommunications Department. In order to test the controls around authorizing, issuing and monitoring of long distance authorization codes, we performed the following steps:

- Verified whether the Telecommunications department maintains a list of users who have long-distance codes and whether they review this list periodically with individual departments to determine whether the codes are active.
- Tested a sample of long-distance authorization code holders to determine whether there are appropriate approvals in place as mentioned in Procedure 12-2.
- Checked whether there are long-distance authorization codes issued to departments rather than individuals and tested for proper approval.

The Telecommunications department maintains a list of all long-distance authorization codes and they review this list periodically to ensure that the codes are active. This list, however, is currently in hard copy format. The department is in the process of creating an Access Database to manage this list electronically. The current format is not an optimal method because it does not maintain a history for the users of the code. The hard copy listing only shows whether a code is active or inactive, whereas the proposed database will accommodate a history for each code.

Telecommunications' policy is that if a code has been expired, it will not be re-issued for at least 10 years. Our testing of a sample of long-distance authorization codes indicated that there are proper approvals in place for issuing a long-distance authorization code. Additionally, Telecommunications has not issued long-distance authorization codes to departments even though by policy they can choose to issue to departments. They chose to only issue to individuals upon request because it presents better control of long distance calling. We concur with their decision.

Based on our testing, it appears that the controls around authorizing, issuing and monitoring of long-distance authorization codes are adequate.

Cell Phones

Per Procedure 12-4: *Long Distance Telephone Usage/Cellular Telephone Usage*, "Department chairs/account managers must authorize (in writing) the use of cellular telephones by University employees within their department/unit whenever any source of University funds is to be used to pay for cellular telephone service. The University must be fully reimbursed for all costs associated with the personal use of University cellular telephone services within ten (10) days following receipt of the cellular telephone billing."

Our audit indicates that Telecommunications does not manage the cell phone issuance on campus. It is managed and monitored by the Office of Accounting and Business Services, specifically, Procurement Services. Our review noted that Procurement Services' Procedure 4-5: *Wireless Communication Device Allowance Procedures*, provides guidance for establishing employee eligibility for a wireless communication device plan allowance, initiation of a request for the plan, maintenance of approved wireless communication device allowance plans, and reimbursement for business calls. In this policy, no mention is made of Telecommunications having any responsibility regarding cell phone issuance to University employees. Having two policies on the same topic is redundant and leads to confusion.

Recommendation #1:

We recommend that the Office of Telecommunications modify or repeal their Procedure 12-4: *Long Distance Telephone Usage/Cellular Telephone Usage*, with respect to the responsibilities and requirements related to cell phone usage.

Management Response:

This procedure will be modified or repealed as suggested.

Target Implementation Date: June 1, 2013

Responsible Party: Director of Network Services, Office of Information Technology

Billing Controls

To verify that the controls around Telecommunications process charges, charge backs and fiscal budget controls are adequate, we performed the following procedures:

- Selected a sample of monthly billing files from Telemaster and compared the total of the billing to the IDTs (interdepartmental transfers) received for that month.
- For the samples selected in "Phone Installations/Cancellations/Service Changes/Repairs" section, we determined whether the department was correctly billed for the service requested and whether Telecommunications received payment for their service.

- Determined how the phone recovery charges allocated to individual departments were calculated and ensured that there was proper approval for these recovery rates.

Our testing noted that Telecommunications is charging departments appropriately and timely. The department is also recouping their cost timely through interdepartmental transfers (IDTs), in accordance with the rates and policies set by the management. We could not determine how the phone recovery charges were calculated and authorized. The department did not have any documentation to support the rates. However, management stated that the rates have not changed in several years. We advised the management that in future when there are rate changes, it should be documented. Therefore, a formal recommendation is considered unnecessary. In conclusion, the controls around Telecommunications process charges, charge backs and fiscal budget controls are adequate.

We also tested whether there are appropriate controls in place to monitor the billing of the telephone companies. In order to accomplish that, we:

- Reviewed a sample of monthly bills from the telephone company (DIR Invoice) for accuracy and did not note any obvious discrepancies.
- Attempted to review the TEXAN agreement to validate the billing rate; however, the agreement was not available at the department. Therefore, we obtained confirmation from the management that the billing rate is appropriate. The senior management stated that the TEXAN rates were set in the 1980s and to their knowledge; the rates have not changed since then.
- Determined whether the department reviews the monthly bill from the telephone company to ensure that the charges are appropriate and that there are no hidden or fraudulent charges passed on to the University.
- Determined whether the department reviews the monthly bill from the telephone company against the Telemaster files to verify that the charges are legitimately incurred by the University.

Our testing indicates that the department also makes a cursory review of the monthly DIR bills for any obvious errors. There is no clear-cut method of comparing the DIR invoices against the monthly Telemaster reports. The two sets of reports cannot be compared due to the different set of parameters for billing rates and duration calculation. The rates used by the service provider are different from Telecommunications' rates. The duration cannot be compared because of the difference in the way the telephone company calculates the minutes. Additionally, the University's switch may not pick up calls as well as the telephone company's switch does. We attempted an independent analysis of the differences between the DIR invoices and Telemaster files for a sample of months; however, we could not identify a clear trend in the differences between the two reports. The management stated that the telephone company is usually good about reversing charges if they have made a mistake. Based on these explanations, further work in reconciling the differences noted in this review was not performed.

Asset Controls

Our testing involved reviewing whether the physical and electronic controls over the departmental assets and technology are adequate. To accomplish that, we:

- Reviewed the appropriateness of the staff's levels of accessibility to the Telemaster Computer system and verified whether there are clear and up-to-date written procedures for each operation in Telemaster.
- Determined whether the Telemaster System is being backed up periodically.
- Assessed the physical security to the computer hardware and switch.
- Determined whether Telecommunications has a disaster recovery plan and whether it has been tested.
- Checked whether laptops have been encrypted in accordance with the new UT System Directive.

Our testing indicates that the physical and electronic controls over the departmental assets and technology are adequate. The access levels of the Telecommunications staff to the Telemaster system is appropriate for their duties. Like the majority of servers on campus, Telemaster is housed at ARDC (Arlington Regional Data Center) and follows the same back-up schedule as all other University servers housed at ARDC. There are no written procedures for every operation in Telemaster, however, there are instructions for the critical functions. This is not considered an exception since several of the staff are already aware of how to operate the system. We also noted that the physical security of the computer hardware and switch is adequate. Telecommunications does not have an official disaster recovery (DR) plan yet. As Telecommunications is now part of the Office of Information Technology (OIT), their DR plan will be incorporated within OIT's plan. The OIT's plan is scheduled to be completed by March 1, 2013.

Additionally, we tested whether the inventory listed in the department's inventory records is accurate. From the FY 2012 inventory report for Telecommunications, we selected a sample of assets from the list and traced them to their physical location. Also, we traced a sample of assets from the physical location to the inventory report. No exceptions were noted.

In the course of this audit, we learned that Telecommunications has not inventoried the departmental high risk assets. University Procedure 2-43: *Responsibilities, Inventories, Reporting and Tracking of University Property*, states that departmental high risk assets are those "controlled assets with a value of less than $500. These assets should be tagged with a departmental tag and a listing of the assets should be maintained in the department." There were several printers, scanners, fax machines, etc., that are used in the department which are valued below $500. If these assets are not inventoried, they cannot be tracked and monitored, which results in a higher chance for theft or misplacement.

Recommendation #2:

We recommend that the Telecommunications department develop and maintain a listing of all the departmental high risk assets (those controlled assets with the value of less than $500) and tag them with a departmental tag so that they can be accounted for and be tracked easily. A periodic physical inventory of these items should also be made so that the chances of misplacement or theft are minimized.

Management Response:

The department has already started this process and plans to put tags on all of this equipment.

Target Implementation Date: March 1, 2013

Responsible Party: Administrative Assistant, Office of Telecommunication

The department does not keep a large inventory of phone sets. Phone sets are mostly ordered on an as-needed basis. The phones used in the University are generally not useable outside of the University because they need a special telephone operating system to operate on. Therefore, the risk of misappropriation of the phone sets is low.

Analytical Reviews

To review the departmental transactions for any unusual transactions or trends, we obtained a download of all transactions for Telecommunications for FY 2012 and FY 2011 and compared the expense and revenue items for the two years. We did not see any abnormal or unexplained variances between the two years. Overall, the total expenses decreased in FY 2012 compared to FY 2011; mainly because of the decreased salaries and wages expense in FY 2012. Previously, when Telecommunications was operating as an independent department, their salary cost was higher. With Telecommunications brought under OIT now, one level of salary (primarily the department head's) has been eliminated. The FY 2012 revenue increased slightly, not because the Telecom recoupment charges increased but because of the increased installation of phone extensions due to the addition of new building spaces on campus. Since Telecommunications' primary revenue is the long distance charges and monthly charges recouped from the other departments on campus, we also compared the total telephone charges for all departments on campus to the total interdepartmental transfers (IDTs) received and recorded by Telecommunications. No significant differences were noted.

Conclusion

Our testing indicates that, overall, Telecommunications has good controls over their operating procedures and monitoring of the departmental billing and charges received from the telephone companies. Their capital assets are adequately safeguarded and accurately reported. However, the department did not keep an inventory of their high-risk assets. We also noted that their operating policy on cell phones, listed on the University's procedures website, was no longer applicable to the department. These findings are not considered significant to the University. We believe the recommendations included in this report will assist the Office of Telecommunications in correcting the above noted deficiencies.

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