

State of Rhode Island and Providence Plantations

Department of Administration  
BUREAU OF AUDITS  
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March 11, 2015

Mr. Jack Landers  
Chief Information Officer  
Division of Information Technology  
One Capitol Hill  
Providence RI 02908

Dear Mr. Landers:

The Bureau of Audits has completed its audit of the Division of Information Technology's telecommunications expense allocation process. The audit was conducted in accordance with Rhode Island General Laws (RIGL) §35-7-3. The recommendations included herein have been discussed with members of management, and we considered their comments in the preparation of this report.

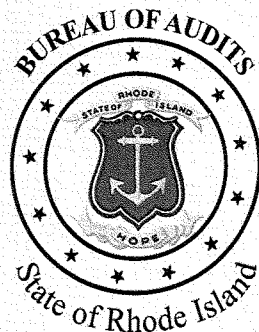
Rhode Island General Law §35-7-3(b), entitled *Audits performed by bureau of audits*, states that, "Within twenty (20) days following the date of issuance of the final audit report, the head of the department, agency or private entity audited shall respond in writing to each recommendation made in the final audit report..." Accordingly, management submitted its response to the audit findings and recommendations on March 10, 2015, and such response is included in this report. Pursuant to this statute, the Bureau may follow up regarding recommendations included in this report within one year following the date of issuance.

We would like to express our sincere appreciation to the staff of the Division of Information Technology for the cooperation and courtesy extended to the members of our team during the course of this audit.

Respectfully yours,

Michael Sprague, CIA  
Deputy Chief

c- Michael DiBiase, Director, Department of Administration  
Honorable Daniel DaPonte, Chairperson, Senate Committee on Finance  
Honorable Raymond Gallison, Chairperson, House Finance Committee  
Dennis Hoyle, CPA, Auditor General  
Dorothy Z. Pascale, CPA, Chief, Bureau of Audits



## Executive Summary

### Why the Bureau Did This Review

At the request of a state department, the Bureau has conducted an audit of the telecommunications expense allocation process. The purpose of this audit is to determine if the cost allocation is equitably distributed and the program operates and is managed efficiently.

### Background Information

The Division of Information Technology (DoIT) is responsible for the telecommunication systems used throughout various state departments and agencies. DoIT incurs expenses associated with the installation and maintenance of telecommunications. The expenses allocated to each department and agency include:

- Installation of equipment
- Local phone service and enhanced features
- Long-distance phone service
- Equipment maintenance
- Personnel and benefits costs

These costs incurred by DoIT directly relate to the service provided and therefore should be allocated to the serviced departments and agencies in a fair and equitable manner.

### Recommendations for a more efficient and effective process are to:

- Periodically review and adjust the expenditure allocations.
- Migrate the allocation process, for the Centrex system, from the decades old mainframe-based system to a modern easily customizable system.

Contents

Objective and Scope .....4

Methodology .....4

Introduction.....4

Recommendations for Improved Controls and Management Responses .....5

    Allocation of Costs Associated with the Centrex Phone Exchange .....5

    Fully Utilize Existing Call Accounting Software to Improve Allocation of Costs.....6

    Allocation of Overhead Costs .....7

    Allocation of Phone Line (401) 235 - 1200 .....8

## Objective and Scope

The Bureau of Audits (Bureau) conducted an audit of the Division of Information Technology (DoIT) allocation of expenses associated with telecommunication services. The purpose of this audit was to determine if expenditures associated with telecommunication services were being equitably distributed to the various agencies and departments that use the services and if this allocation was performed in an efficient manner.

## Methodology

In order to accomplish the audit objectives outlined above, we obtained a thorough knowledge of how the telecommunication allocation is executed. In order to obtain an understanding of the process we:

- Interviewed DoIT management and staff
- Gained an understanding of procedures used to calculate the expenses to be distributed
- Thoroughly reviewed the process in place and available inputs to the process
- Gained an understanding of existing software capabilities

## Introduction

DoIT is responsible for the installation and maintenance of telecommunication services for state agencies and departments. DoIT incurs expenses associated with the installation and maintenance of telecommunication services. These costs incurred by DoIT relate directly to the telecommunication services provided and, therefore, should be allocated to the participating departments and agencies in a fair and equitable manner. The total cost to be allocated is comprised of:

- Installation of equipment
- Local phone service and enhanced features
- Long-distance phone service
- Equipment maintenance
- Personnel and benefits costs

DoIT uses two distinct systems to provide telecommunication services to state departments and agencies. One is a Centrex system in which the vendor supplies most installation and maintenance services. The other is a PBX service in which DoIT telecom personnel provide installation and maintenance services.

The Centrex cost allocation includes vendor invoices for local and enhanced services, long-distance service and fifty percent (50%) of DoIT telecom personnel expenses. The calculations for this allocation are performed by two programs run on a mainframe computer.

The PBX service is split into two exchanges (“574” and “462” numbers). DoIT uses a telecommunications accounting software program (Microcall) to manage the PBX systems. This program provides a report, for each exchange, that summarizes usage by reportable unit, within departments and agencies.

However, each report is used differently. The report for the “574” exchange is used to allocate local and long-distance charges by the percentage of total calls for each unit within the exchange. The actual calculations are performed in an Excel spreadsheet. The report for the “462” exchange is used to allocate the amounts shown in the “Cost” column directly to specific accounts. This represents the local calls made. There is also a fixed amount that is charged to one Department of Labor and Training account. The balance of the local and long-distance services are distributed to all PBX phone line accounts through an overhead distribution, based on total PBX phone lines. This overhead distribution includes DoIT personnel and benefit costs, as well as equipment/supplies, not associated with specific agency/department accounts.

One additional phone line was identified that was not a Centrex or PBX number, which was allocated to multiple accounts. The basis for this allocation was determined several years ago. However, current personnel could not attest to the validity of its distribution percentages.

## **Recommendations for Improved Controls and Management Responses**

### **Allocation of Costs Associated with the Centrex Phone Exchange**

A proper allocation process should only distribute actual and identifiable expenditures, in a fair and equitable manner, to the departments and agencies using the exchange.

The current allocation process consists of uploading several files into programs run on a mainframe computer. The final output from these programs are the amounts charged to each telecom account and the calculated cost of each phone. This process generates a total allocated amount that exceeds the actual expenditures. This results in an overcharge for each Centrex phone and the associated account in the state accounting system.

#### **Recommendations:**

- 1.) DoIT telecom personnel must develop a new allocation process that allocates only actual expenditures identifiable with the Centrex phone system.

#### **Management Responses:**

A new cost allocation process to be developed will utilize only Verizon CENTREX and CenturyLink (long-distance) billing data to charge back agency users monthly. The application to be used for this process can be simplified to a spreadsheet or database format; however we are investigating the potential to match State budget account information to CENTREX/CenturyLink telephone numbers. This would eliminate the decades-old COBOL processing component of billing information and other inputs that

have resulted in the discrepancies of charges billed. It must also include report generation to detail usage per account/lines similar to what agencies receive via mainframe reports now.

**Responsible Party:** Peter Petrone / Linda Joharjian

**Completion Date:** July 1, 2015

## **Fully Utilize Existing Call Accounting Software to Improve Allocation of Costs**

Good business practices require personnel to have a working knowledge of any software they use. This is necessary not only to interpret program output, but also to ensure the ability to make modifications as required by changing circumstances.

Telecom staff uses call accounting software to compile data on phone usage by the two PBX systems and generate summary reports. However, they do not have an understanding of how the program works, or how to interpret the reports used for cost allocation. The same call accounting system is used for each of the PBX phone exchanges ("462", "574"). The same report is generated for each exchange, which summarizes usage. However, the report is used differently for each exchange. The cost allocation for the "574" exchange uses the percentage of total calls, in the report, to allocate both local and long-distance service to each reportable unit, within the "574" exchange. The cost allocation for the "462" exchange uses the Cost column amounts as a partial allocation of the local service costs. An additional fixed amount, of the local service, is charged to a unit at the Department of Labor and Training (DLT). The remaining balance of the local service and long-distance charges are added to overhead and distributed to all "462" and "574" phone lines. This allocation method results in "574" phone lines being allocated 100% of the local and long-distance service charges for their exchange, plus a portion of the local and long-distance service charges for the "462" exchange.

### **Recommendation:**

- 2.) DoIT telecom personnel must become familiar with the call accounting software used for the PBX phone exchanges. They should develop more comprehensive reports, capable of allocating the costs of both local and long-distance calls to the phones actually incurring the charges.
- 3.) DoIT telecom personnel needs to determine if the fixed charge applied to DLT is still valid and if the amount is appropriate.

### **Management Response:**

Additional training and support will be provided by the call accounting software vendor, Microcall, to ensure that telecom staff regularly update PBX service data so that monthly billing is current and

accurate. The system will also be updated to reflect all revisions to service rates under telecommunications services MPA308.

Monthly charges assigned to either the "462" or "574" exchanges will be billed equitably based on actual use – not through percentage assignments.

*(For #3 – we will confirm)*

**Responsible Party:** Jacqueline Drouin

**Completion Date:** July 1, 2015

### **Allocation of Overhead Costs**

Cost allocation processes must be reviewed and modified as circumstances change.

Costs that are not identifiable to a specific phone line are distributed to all PBX phone lines through an overhead allocation. This overhead allocation is based on the number of PBX phone lines associated with each account in the state accounting system. The number of phone lines that forms the basis for this allocation needs to be updated. Some agencies do not share in the allocation of overhead, because their phone lines have not been added to the calculation.

### **Recommendation:**

- 4.) DoIT telecom personnel must establish a procedure to review and update the overhead calculations, so all appropriate phone lines are included and all agencies equitably share the costs of phone service.

### **Management Response:**

Overhead costs will be applied equitably across all "462" and "574" users. Initial updating will be performed to bring the database current, and monthly line count updates will be completed ahead of agency bill processing.

**Responsible Party:** Peter Petrone

**Completion Date:** July 1, 2015

## Allocation of Phone Line (401) 235 - 1200

Any cost allocation methodology must be documented and periodically reviewed and modified when necessary.

Phone line (401) 235-1200 is shared by four agencies (DoIT, Division of Motor Vehicles–Operator Control, Department of Labor and Training and Department of Corrections – Probation). DoIT telecom personnel were unable to explain the basis for the percentages used to allocate the local and long-distance charges for this phone line, or when they were established.

### **Recommendation:**

- 5.) DoIT telecom personnel must verify the percentages used to allocate the costs of this phone line and establish a procedure for periodically reviewing and updating the percentages.

### **Management Response:**

A new allocation for (401) 235-1200 has been generated and revised percentages of use applied. This allocation will be updated monthly for billing purposes. These changes will be reflected in agency billing immediately.

**Responsible Party:** Jacqueline Drouin

**Completion Date:** March 3, 2015